The Healthy Housing Programme: Report of the Outcomes Evaluation (Year One)

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Prepared for:
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Date: 24th August 2005

Acknowledgements

The contributions of personnel from Housing New Zealand Corporation (HNZC) and Counties Manukau and Auckland District Health Boards to this report are acknowledged with thanks.

Household interviews were carried out by Alison Searle, Ruth Talo, Nerra Lealiifano, Gina Pene, Ramona Tiatia and Ian Hepiri, and we are grateful for their hard work and perceptive collection of stories from HNZC tenants participating in the Healthy Housing Programme (HHP).

Associate Professor Philippa Howden-Chapman and Dr Michael Baker from the University of Otago, Wellington Clinical School, Department of Public Health were co-investigators on the evaluation project.

We would like to thank all HNZC tenants and HHP team who agreed to be interviewed and share their stories.

Disclaimer

ISBN 0-477-10016-3

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Aims

This report provides findings from the first of a three year outcomes evaluation of the Healthy Housing Programme (HHP). Background on methodology and methods adopted is presented. The aims of the evaluation are to identify and critically review evidence that the HHP has made a difference in the risk and rate of housing related diseases, conditions and injuries, and improved wellbeing; outcomes that have been achieved for the HHP; and any obstacles to the achievement of expected and unexpected outcomes for the HHP. In particular, the evaluation assesses the extent to which the programme has contributed to the effectiveness and efficiency of the collaboration between Housing New Zealand Corporation (HNZC) and District Health Boards (DHBs) in assessing and meeting housing and social needs; wellbeing and social outcomes (such as sense of comfort in the house, perceived reductions in housing-related illness and accident, income, employment, community participation) for tenants involved with the programme; improved quality of HNZC's housing stock; the effectiveness of the utilisation of housing stock; any reduction in unmet housing need; and reduction in inequalities in housing.

Methodology and Methods

The methodology draws on the philosophy and culture of the programme: a strengths-based, solution-focused and collaborative approach. The evaluation questions, selection criteria, and data collection methods were therefore developed in collaboration with programme providers. The evaluation adapts an approach known as the Success Case Methodology (SCM) to determine 'what success looks like' based on a review of programme documentation and the literature around housing and wellbeing. Evaluation questions were developed directly from the programme logic. Because of the complexity of this evaluation, an Evaluation Crosswalk framework has been used to structure and categorise the evaluation questions, and indicate proposed data sources for addressing each evaluation question. Multiple data sources are being used to triangulate data gathering. Household selection criteria were developed from discussions with case-workers and providers, and these encompass various types of intervention as well as perceptions of success based on inputs. Four levels of comparison have been selected to compare and contrast findings within the selected households: level of intervention; level of need, length of time from intervention; and benchmarking with what the provider team identified as examples of 'positive', 'negative' and 'complex' households.

Interviews were conducted with two key stakeholder groups in the HHP: service providers and HNZC tenants. During June, semi-structured interviews and/or focus group sessions were completed with service providers: Four Public Health Nurses (PHN), two each from Counties Manukau and Auckland DHBs; the Community Health Workers (CHW) in Manukau; four Area Coordinators (AC) the Solutions Coordinator and Project Coordinator; the three Project Managers from HNZC, Auckland and Counties Manukau District Health Boards (ADHB and CMDHB); and the PHN Service Manager for CMDHB. Interviews were conducted with members of twenty households, and information was gathered in multiple interviews (up to three per household).

Analysis of the data was undertaken using a general inductive approach to identify common and significant themes. The findings are presented under key theme headings.

Outcomes

Many stories demonstrate successful outcomes from the providers' perspective including explanations of why these successes occurred. The providers firmly believed, and could present evidence to support their view, that the participants in the programme were experiencing a greater sense of wellbeing physically and psychologically, were participating in family, community and social life to a greater degree and housing related illness had reduced.

Evidence of collaboration has emerged at all levels, namely between the Project Managers for housing and health, between HNZC and the PHNs, internally within both agencies, and with multiple external agencies. Further, themes supporting the sustainability of the programme include the leadership style and management approach of the Project Managers, the unique partnership perspective of the programme's members along with the attributes of the team members and a very strong strengths-based solution focus. The providers also presented a number of recommendations regarding how changes that started with the programme can be sustained including; strategies to prevent re-crowding, initiatives to improve housekeeping skills, support for life style changes and ways the providers have found to address health issues they identified during their assessments.

Obstacles to the success of the HHP from the providers' perspectives include; the impact on and relationships with HNZC Neighbourhood Units; 'no shows' by tenants at assessment meetings; the availability of ongoing funding; the risk of recurrence of the original problem; and delays to the process of interventions.

The majority of households that were interviewed for this evaluation concluded that their experience with the programme had been a positive and beneficial one for their health and wellbeing. The most common outcomes identified included: increased empowerment; a reduction in illnesses such as asthma; improved comfort of their home; a general sense of social wellbeing and functioning within the household. The latter outcome of enhanced social wellbeing was expressed in many different ways, and often as an indirect (and perhaps unexpected) effect of a particular aspect of the HHP intervention. Certainly, the strongest connection made between the programme and tenants' health referred to psychological and social dimensions of wellbeing of the household (e.g. stress, happiness, and connection to family). If the tenants had a complaint it is that the grounds need to be comparable with the standard of the house.

In household interviews, the tenants' perception of outcomes often revolved around the tangible changes made to their household, such as additional bedrooms, bathrooms, and structural modifications. Those who were in households where extensive changes had been made were able to convey a greater number of effects than those who only received minimal housing interventions. Those with the minimum insulation/ventilation intervention often noticed an improvement in the 'comfort' of their home, which had several effects on the household from simple enjoyment of the home to an observed reduction in housing-related illness (particularly asthma and respiratory infections). Tenants for whom the HHP delivered greater structural change (modification, extension

or transfer) gave more detailed stories about how the changes in space, communal service areas and specific modifications had created a more suitable living environment for their household composition.

Overall, our analysis suggests three levels of change. First, those specific to households, categorised into: functioning of families and daily life; participation in social and community life and activities; an increase in overall wellbeing; increased perception of safety and a sense of comfort; and pride and happiness in their home. Second, those specific to provider's categorised into: increase in staff awareness and professional expertise; a philosophical shift linked to a move towards a greater role in advocacy and education; aligned with greater job satisfaction. Finally, there appears to have been a marked increase in the effectiveness and development of collaboration amongst state agencies.

Conclusion

The power of the HHP is the opportunity it presents to providers to be flexible in their responses to tenants in need. The characteristics of behaviours and the buildings are considered in the light of their consequences for household wellbeing.

The programme succeeds in addressing concerns and behaviours that extend beyond the walls of the house itself. The fact that the programme promotes participation – in housing decisions and, indirectly, in neighbourhood life – is of health consequence for, as social epidemiology tells us, social isolation is ultimately corrosive of health.

In addressing the breadth of connections between housing and human welfare, the HHP is granting low income householders' greater control over their residential environment and, in a sense, giving them a greater sense of agency in their lives.

Abbreviations

AC	Area Co-ordinator
ADHB	Auckland District Health Board
CAU	Census Area Unit
CBA	Cost Benefit Analysis
CHW	Community Health Worker
CMDHB	Counties Manukau District Health Board
CNOS	Canadian National Occupancy Standard
CYF	Child Youth and Family
DHB	District Health Board
GP	General Practice
HAP	Household Action Plan
HHP	Healthy Housing Programme
HNZC	Housing New Zealand Corporation
IRR	Income Related Rent
NDHB	Northland District Health Board
NHI	National Health Index
NZHIS	New Zealand Health Information Service
OT	Occupational Therapist
PHN	Public Health Nurse
PHO	Primary Health Organisation
RENTEL	Database of HNZC tenants
SCM	Success Case Methodology
SPU	Special Programmes Unit
TM	Tenancy Manager
WINZ	Work and Income New Zealand

1 INTRODUCTION

Findings from both provider and household interviews will be presented in this document, the first of three outcomes evaluation reports to HNZC. This report presents findings from interviews with providers involved in the development, management and delivery of the programme, and with households who have been a part of the HHP. The report provides context for the information collected, and enables a discussion of the characteristics of the HHP that may foster collaboration and sustainability. The evaluation approach is innovative and therefore this report also outlines the methods used in conceptualising and conducting the HHP outcomes evaluation.

1.1 Structure of the report

The report begins with an outline of the background and aims of the outcomes evaluation followed by a short account of the HHP. This is followed by the findings from the provider and household interviews. Finally a description is presented of the methodology underpinning the evaluation together with the framework adopted to identify the themes and specific areas to be explored. The process by which households were selected is then detailed.

1.2 Rationale and aims of the outcomes evaluation

Evaluation is a means of assessing the merit, value, and effectiveness of programmes in the light of their objectives. HNZC's Statement of Intent requires that all programmes be evaluated (HNZC, 2004c), and in particular HNZC has been required to undertake an outcomes evaluation of the HHP. An outcomes evaluation assesses the quality and significance of programme outcomes, both positive and negative (Stufflebeam, 1983).

The outcomes evaluation aims to identify and critically review:

- Evidence that the HHP has made a difference in the risk and rate of housing related diseases, conditions and injuries, and improved wellbeing;
- Outcomes that have been achieved for the HHP; and
- Any obstacles to the achievement of expected and unexpected outcomes for the HHP.

More specifically, the outcomes evaluation aims to assess the extent to which the programme has contributed to:

- The effectiveness and efficiency of the collaboration between HNZC and the DHBs in assessing and meeting housing and social needs;
- Wellbeing and social outcomes for HNZC tenants arising from HHP interventions (such as sense of comfort in the house, perceived reductions in

housing-related illness and accident, income, employment, community participation);
- Improved quality of the HNZC housing stock;
- The effectiveness of the utilisation of HNZC housing stock;
- Any reduction in unmet housing need; and
- Any reduction in inequalities in housing.

1.3 The connection between housing and health: research background

For many New Zealanders, home is not the safe space we'd like to imagine (Bullen, 2004). From inadequate ventilation to insufficient heating, cluttered kitchen space to old carpeting, the home environment can prove detrimental to health.

According to several review papers, cold, damp, and mouldy homes contribute to ill health (Breysse et al., 2004; Krieger & Higgins, 2002; Krieger et al., 2002). In one study of Pacific New Zealand mothers, mothers who reported problems with dampness/mould and cold were at greater risk of having asthma, as well as postnatal depression (Butler, Williams, Tukuitonga, & Paterson, 2003). As both inadequate ventilation and overcrowding increase moisture in the home (Krieger & Higgins, 2002; Krieger et al., 2002), the researchers concluded that reducing household size, improving standards of state rental housing and providing high-risk groups with information to minimise dampness and cold housing should be of priority for housing and health agencies working with Pacific families in New Zealand (Butler et al., 2003). In addition to mould, interior moisture provides a nurturing environment for mites, roaches, respiratory viruses and bacteria, all of which play a role in the development and maintenance of asthma and other chronic respiratory diseases (Breysse et al., 2004; Howden-Chapman, 2004; Krieger & Higgins, 2002).

Cold interior temperatures are an independent factor in morbidity and mortality. There is some evidence that cold interior temperature (below 15ºC) is a risk factor in increasing asthma severity and Chronic Obstructive Pulmonary Disease. It is generally the poor who have to pay more for heating in relation to income, but who are least able to improve the energy efficiency of their homes (Howden-Chapman, 2004).

To reduce asthma, allergen exposure should be reduced as much as possible (Breysse et al., 2004). Insufficient ventilation increases indoor air pollutants that contribute to asthma, such as tobacco smoke and nitrogen dioxide from inadequately vented or poorly functioning combustion appliances (Breysse et al., 2004; Krieger & Higgins, 2002; Krieger et al., 2002).

As well as supporting interior moisture, overcrowding increases transmission of a number of infectious diseases, particularly those spread by respiratory means and direct contact, and may also contribute to transmission of skin infections (Baker, Milosevic, Blakely, & Howden-Chapman, 2004). A large case-control study of meningococcal disease in Auckland schoolchildren showed that household crowding was the most important risk factor for this disease (Baker et al., 2004).

Structural deficits can have more obvious effects on tenants. Falls are the primary source of residential injury for children. Lack of safety devices such as grab bars, safety gates, or window guards; structural defects in the home; and insufficient lighting on stairs and other areas are the leading hazards associated with injurious falls (Breysse et al., 2004).

The effects of substandard housing often go beyond physical illness. Both dampness and crowding have been linked to poorer mental health and psychological distress (Butler et al., 2003; Krieger & Higgins, 2002), due in part to concerns for the health of household members and the financial burden of dampness-related property damage. Furthermore, occupants of substandard housing may be reluctant to invite guests into their homes, leading to social isolation, a condition associated with mortality (Krieger & Higgins, 2002). On a larger scale, housing type influences the quality and quantity of interactions within neighbourhoods, affecting social cohesion, trust, and a collective sense of belonging (Kearns, 2004).

People with low income are the most likely to live in substandard housing, yet they are the least likely to have the political or financial capital to invoke change (Breysse et al., 2004; Krieger & Higgins, 2002). The burden of responsibility needs to shift to landlords, homebuilders, renovators, and remodelers to make houses healthy and safe, and government supported housing should promote basic healthier housing construction standards (Breysse et al., 2004). Nonetheless, tenants are best served when they are actively involved in the solution of health problems. In reviewing housing interventions across the US, Saegert and her colleagues (Saegert, Klitzman, Freudenberg, Cooperman-Mroczek, & Nassar, 2003) concluded that involving people more deeply in the solution of health problems, especially by home visits, was especially effective and improved multiple health outcomes, promoted fuller human development, improved social functioning, and had the potential to increase psychological wellbeing. In order to sustain housing intervention outcomes, an ecological approach (involving professionals, household members, communities, and political units) was recommended (Saegert et al., 2003).

In some cases, structural improvements are not sufficient and tenants of substandard housing must be moved into a new home altogether. Moving house is generally considered a stressful, health impairing life event. It is associated with loss of community, disruption of social networks, and unsatisfied social aspiration – factors that can counteract the positive health effects of moving to alleviate stress (Kearns, 2004; Thomson, Petticrew, & Douglas, 2003). In social housing, in particular, this has been attributed to a lack of opportunity to negotiate with the housing authority regarding the move (Thomson et al., 2003), reiterating the value of tenant inclusion in the planning and implementation of healthy housing improvements.

1.4 Description of the HHP

1.4.1 Origins

The HHP is a collaborative initiative involving HNZC and three DHBs: CMDHB, ADHB and Northland (NDHB).

In December 2000, HNZC, Auckland Regional Public Health Service (ARPHS, a regional public health service operated by ADHB) and South Auckland Health (now CMDHB), initiated the programme with the primary aim of reducing the risk of infectious diseases, particularly meningococcal disease, among families residing in HNZC properties. Epidemiological research conducted in Auckland between 1997 and 1999 on risk factors for meningococcal disease found the most important risk factor for developing meningococcal disease in Auckland children to be living in a crowded house (Baker et al., 2000). The association of household crowding with disease has been found for many other conditions including tuberculosis, rheumatic fever, skin infections, gastroenteritis and mental illness (McNicholas, Lennon, Crampton, & Howden-Chapman, 2000). Areas with the highest rates of meningococcal disease were found to be those with the highest levels of household crowding. HNZC, the largest landlord in South Auckland, was concerned, as its houses were over-represented in these areas.

The partnership between HNZC and the DHBs was established formally through Memoranda of Understanding. The initiative was named 'the HHP' and began with an 18-month pilot phase from January 2001 to June 2002 in Onehunga, Mangere and Otara in Auckland.

HHP uses a strengths-based, solution-focused approach (De Shazer, 1985; Saleeby, 1997). The characteristics of this approach are that providers assess household situations in partnership with families, storytelling is used to work out what interventions will be appropriate in the circumstances, providers and families work together to access resources, and providers encouraging families to take as much responsibility for changing family circumstances as possible.

The evaluation carried out by Auckland UniServices for the pilot phase of HHP (January 2001 - June 2002) showed that the intervention was associated with a reduction of 33 percent in hospital admissions in the intervention group compared with a geographically-matched comparison group (Auckland UniServices Ltd, 2003). Allied with this was an increase in emergency room and outpatients clinic attendances in the intervention group compared with controls. These findings together point to an increase in early care-seeking (a desirable result for HNZC's tenants who generally underutilise healthcare services given their level of ill health), which could plausibly lead to a decrease in hospital admissions (Auckland UniServices Ltd, 2003). These important findings have not yet been confirmed by further analyses, nor re-assessed to see if the changes have been sustained.

The pilot evaluation included interviews with six participating households. This identified a number of issues about the delivery of the programme to tenants, including: the need for clear communication of the process; information about the roles and activities of the different agencies involved; and the opportunity for tenants to contribute to design plans (including requesting culturally specific requirements). The case studies further highlighted that the proper use of space and healthy living behaviours of tenants are as important as housing modifications (Auckland UniServices Ltd, 2003). The evaluators noted the high level of goodwill that existed between the agencies taking part in the pilot. The HNZC and DHB representatives worked well together, and collaborative relationships were established with many different health and social service agencies.

Over time, the programme's scope broadened to encompass objectives around improving the health and welfare of HNZC tenants living in identified areas of extreme health risk and/or crowded conditions through collaborative activities with DHBs and social service agencies. The programme currently has four objectives:

1. Improved health outcomes for HNZC tenants;
2. Improved welfare outcomes for HNZC tenants;
3. Reduction in the risk of housing related health problems; and
4. Improved availability and quality of state housing for larger families.

To achieve these aims the programme has a number of intervention levels:

- A housing intervention by HNZC aimed at reducing the risk of housing related diseases, conditions and injuries;
- A specific housing intervention designed to reduce overcrowding;
- A health intervention by DHB PHNs aimed at improving tenant access to primary health care services, and tenant knowledge and behaviour to improve health outcomes;
- A joint intervention that identifies social wellbeing and support issues and provides linking and facilitation to the appropriate government and social service agencies; and
- Development of household action plans to promote sustainability are initiated by HNZC as required for tenants whose houses are extended or who move into new houses. This is a Housing Services intervention and strictly not a key element of HHP.

More recently, the HHP has been implemented in other areas of CMDHB and ADHB. A partnership has also been established with NDHB and the HHP has commenced operation in Whangarei and Kaitaia in Northland.

Collaborative work began with the establishment of governance and management structures hand-in-hand with joint project and implementation planning. This included the establishment of agreed policies and procedures between HNZC and the three DHBs. The programme has been acclaimed as a health innovation, winning the supreme 2005 New Zealand Health Innovations Awards.

1.4.2 Intervention area and household selection

House selection was initially carried out using HNZC tenancy data. However, it was discovered that health issues were not restricted to crowded houses. Over 80 percent of households with high occupancy ratios had one or more (average of three) health and welfare referrals. The approach was therefore changed to cover all households in an area rather than just those with higher occupancy ratios. Intervention area selection is currently based on a ranking exercise in which Census Area Units (CAUs) are scored and ranked according to a combination of criteria. These include: crowding data derived from the population census; deprivation score (NZDep2001); hospital discharge data on

communicable diseases with a known association with household crowding; and high concentrations of HNZC houses in the CAU.

1.4.3 Household assessment

To assess and determine the level of crowding, identify health risks and unmet housing needs of households in the priority sites, a joint assessment tool was developed. This tool is administered by a PHN, AC or tenancy manager (TM) in conjunction with participating families. The AC or TM focuses on the property: suitability of the house for the family given its size, age and sex composition; outstanding maintenance needs; the presence and condition of 'health hardware' (such as the toilet, laundry and kitchen appliances); the presence of mould and damp; adequacy of fencing on the property; and so on. The PHN's focus is on the health (including mental health and disability) of the family and their linkage with appropriate health and social support services.

1.4.4 Joint action plans

A joint action plan is developed by the PHN and AC or TM in association with community clinicians, and discussed with the household. Solutions are further refined and enhanced through regular discussions with PHN Co-ordinators, Project Managers and clinicians. The responses in the joint action plan include: referral to health and social service agencies (sometimes requiring crisis interventions such as emergency food provision or hospital admission); design improvements to the house; extensions to accommodate the size of the family; transferring families to larger homes; and installing insulation, ventilation and energy efficient heating systems.

Household Management Plans were an innovation arising from the HHP. It was realised early on in the HHP that families needed information and guidance about how to maintain their improved properties, how to use the various fixtures and fittings (such as ventilation units, or thermal drapes) appropriately and safely and so on. Thus the notion of the Household Management Plan was developed, as a guideline for assisting households to better 'manage' their home environment. Many families had little familiarity with the most basic ways to keep a house clean, dry and warm. Subsequently, HNZC has adapted this approach in the form of Household Action Plans (HAP), and in turn the HHP has adopted the HAP as a starting point when handing over an upgraded property to tenants, with Housing Services then having the ongoing responsibility of monitoring changes that households are able to make in accord with the HAP guidelines.

1.4.5 Housing design

The HHP's AC is responsible for household liaison and co-ordination of building renovations. If a renovation is required, a brief is prepared based on the joint action plan and given to the Special Programmes Unit (SPU) in HNZC. The SPU specialises in building contract management and briefing architects working for HNZC. The SPU manages the building contract from design and building consents through to tendering

and construction. The AC manages the relationship with tenants during this process. Emphasis is placed on ensuring that houses incorporate the design elements critical to ensuring the health and wellbeing of the families, within the budget available.

HNZC's Housing Design Guide has been developed to ensure that house designs are at once appropriate in size, style and configuration, are robust, and are a wise use of limited resources. A fine line exists between what might be achievable and what is affordable, given the high demand for affordable, adequate housing in the community. For the first few years of the HHP no such design guide existed, and the programme managers, and HNZC design and construction staff, had to determine and debate, with a paucity of available information, the best possible housing solutions for a range of deprived households within the limited budget available. Learnings from this process have contributed to HNZC's current design and material specifications, and design consultation and building processes.

Consultation with households includes scope for choice of colours and fittings such as carpets and curtains. The design elements include: site, size, aspect and space; number of bedrooms required for the size and age/sex/relationship composition of family; living spaces required for the size of family; physical/structural aspects (such as access, storage, indoor/outdoor flow); hardware (heating, bathroom and kitchen fittings, etc.); social and cultural activities and preferences; and installation of ventilation and/or insulation if needed.

During renovations households are sometimes required to move into alternative accommodation for several weeks.

1.4.6 Follow-up

Upon completion, the household is visited to ensure that they are familiar with the new features of the house, their operation (e.g. window ventilation strips, extraction ventilation fans in bathrooms and kitchen) and maintenance of a healthy indoor environment. The linkage to appropriate health and social services is followed up by the PHN, where appropriate and if resources allow.

1.4.7 Interventions undertaken in the HHP

Table 1 shows the component interventions provided in the HHP.

Table 1: Main interventions in the HHP

Intervention components	Description
Housing	
Healthy environments	Insulation, ventilation and heating (IVH)
Design improvements	Upgrading kitchen, upgrading bathroom, creation of open plan living, etc.
Crowding reduction – enlargements	Enlargement (built extension*, wing attachment, etc.)
Crowding reduction – transfers	Transfer (part or whole) of the household to alternative existing HNZC houses, new-build**, redevelopment*** or purchase
Other	Moved to private sector, notice of remedy****
Health	
Health	Health education and/or referral to health agencies and/or welfare agencies

* Extension means rooms are added to existing properties to increase the availability of living space.
** A new-build occurs when HNZC erects a new house on newly bought land.
*** A redevelopment occurs when HNZC erects a new house on existing HNZC land.
**** A Notice of Remedy is served if the tenant is unnecessarily in breach of their Tenancy Agreement, typically by overcrowding their house with people who do not qualify for the HNZC accommodation.
(Source: Personal communication, Dr Patricia Laing, Senior Research and Evaluation Analyst, HNZC)

Depending on the needs of the individual households usually more than one intervention is provided. Intervention combinations and the number of households receiving them in the period from July 2003 to June 2004 are shown in Table 2. This table came from the analysis of RENTEL data and may include some double counting. However, this gives an indication of the proportion of main intervention combinations in the HHP.

Table 2: Main combinations of interventions by number of households for the HHP (July 2003-June 2004)

	Combinations of Interventions	No of Households
A	Insulation, Ventilation, Heating (IVH) + HI*	719 (80.07%)
B	Design Improvements + IVH +HI	19 (2.12%)
C	Enlargements + IVH + HI	32 (3.56%)
D	Transfers + HI	35 (3.90%)
E	Transfers + IVH + HI	69 (7.68%)
F	Transfers + IVH + Enlargements + HI	24 (2.67%)
H	Only Health Interventions (HI)	0 (0%)
I	Only IVH	0 (0%)
	Total	**898 (100%)**

* HI = Health Interventions
(Source: Personal communication, Dr Patricia Laing, Senior Research and Evaluation Analyst, HNZC)

Further work is being undertaken to eliminate the double counting and link the number of households to the number of the interventions.

1.4.8 Housing interventions

Since the beginning of the programme in January 2001 to the end of December 2004, the following housing interventions have been undertaken (see Table 3).

Table 3: Housing components of HHP, activity by DHB (January 2001- December 2004)

Type	CMDHB	ADHB	NDHB	Total
Extension	213	37	1	251
Relocatable Unit	2	0	0	2
Wing Attachment	15	5	0	20
Buy-in	17	0	0	17
New Build	12	13	0	25
Design Improvement	29	15	0	44
Moved Private Sector	65	8	2	75
Insulation	647	318	136	1101
Ventilation	1064	401	154	1619
Heating	107	168	101	376
Transfer	189	20	4	213
New Application	83	16	2	101
Total Responses	**2443**	**1001**	**400**	**3844**
Joint Assessments	**2013**	**601**	**229**	**2843**
Total Households Assisted	**1862**	**520**	**131**	**2513**

(Source: HNZC's internal document: 2005 New Zealand Health Innovation Awards Entry Form)

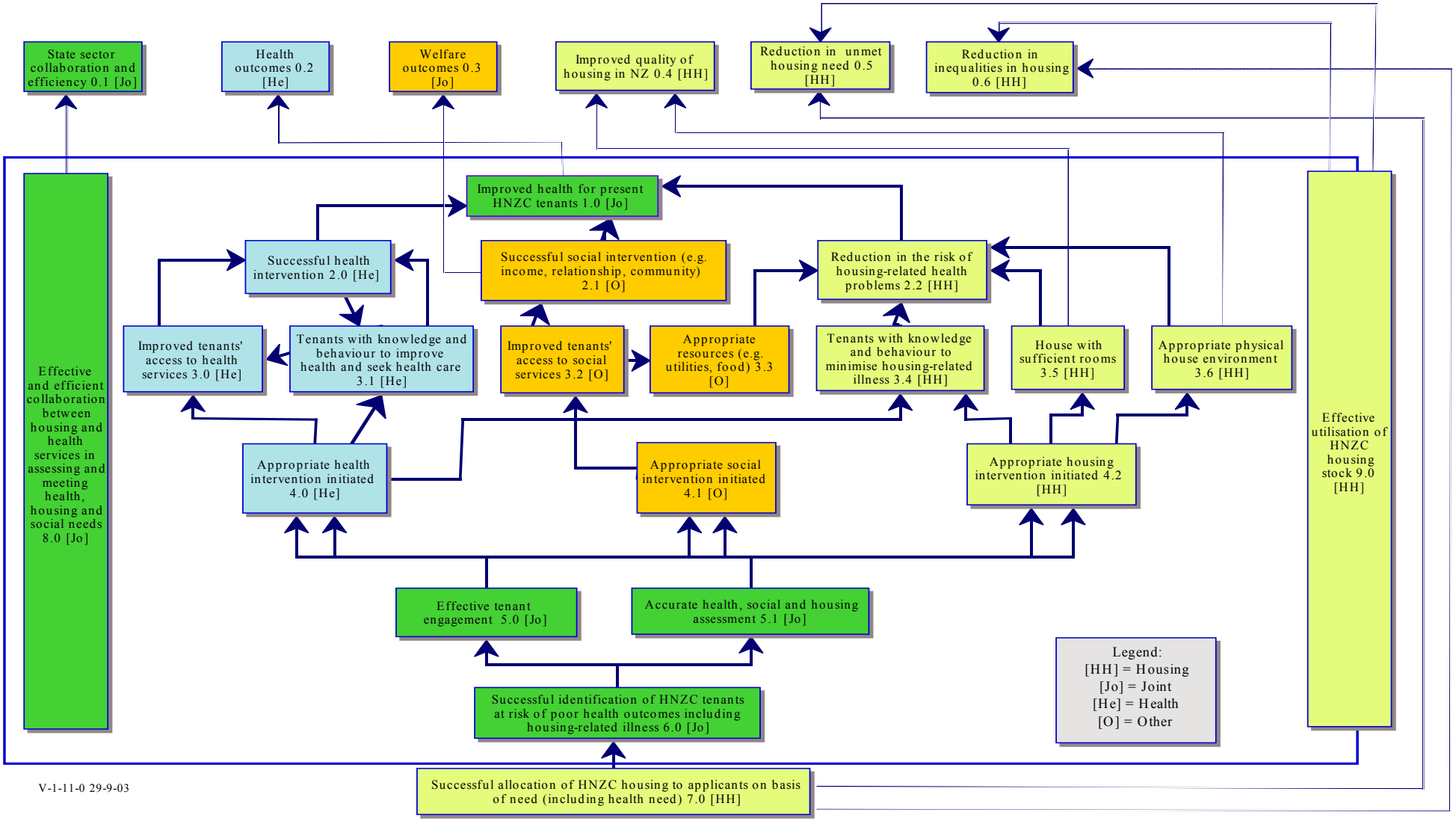


Figure 1: Programme logic for the HHP

2 PROVIDERS' PERSPECTIVES

2.1 Overview

Semi-structured interviews and/or focus groups were undertaken with all HHP service providers.

- Four Public Health Nurses (PHNs) (two each from Counties Manukau and Auckland DHBs);
- A Community Health Worker (CHW) working with the PHNs in Manukau;
- Four HHP Area Coordinators (ACs), as well as the HHP Solutions Coordinator and Project Coordinator;
- The three Project Managers from HNZC, Auckland and Counties Manukau DHBs;
- The PHN Service Manager for CMDHB;
- A HNZC Contract Manager;
- A HNZC Contract Supervisor; and
- Three Occupational Therapists (OTs) working for the Auckland and Counties Manukau DHBs.

Interviews of approximately 60 - 90 minutes duration were completed with providers. Analysis was undertaken using a general inductive approach to identify common and significant themes emerging from interview data.

The following sections describe the common themes that emerged during the analysis of provider comments.

- What is the evidence that the success of HHP contributes to the outcomes?
- What are the obstacles to success?
- What evidence is there of collaboration?
- Can the impact of the HHP be sustained?
- Is the HHP a sustainable programme?

Themes relating to the HHP's contribution to successful outcomes include the providers' perspectives of the programme, as well as their suggested quantitative and qualitative ways to identify success. There were many stories that demonstrate successful outcomes from the providers' perspective including explanations of why these successes occurred.

The main obstacles to the success of the HHP include the impact on, and relationships with, HNZC Neighbourhood Units, 'no shows' by tenants at the assessment meetings, the availability of ongoing funding, the risk of recurrence of the original problem, and delays to the process.

Evidence of collaboration has emerged at all levels, namely between the Project Managers for HNZC and the DHBs, between HNZC and the PHN's, internally within both agencies, and with multiple external agencies.

Themes that emerged regarding how changes that started with the HHP can be sustained include strategies to prevent re-crowding, initiatives to improve housekeeping skills, support for life style changes and ways the providers have found to address health issues they identified during the assessment.

Themes supporting the sustainability of the HHP include the leadership style and management approach of the Project Managers, the unique partnership perspective of the programme's members along with the attributes of the team members and a very strong strengths-based solution focus.

2.2 Outcomes from the providers' perspective

The providers' perspective of successful outcomes includes their perspectives of the programme goals, identification of outcomes, and success stories. Analysis of 'why the success occurred' follows. Italicised text in the following sections indicates a story or example from the provider interviews that relates to the discussion.

2.2.1 Key goal areas of the HHP

The providers were asked during their interviews to describe the goals of the HHP. Six key goal areas were identified:

1. To alleviate household overcrowding.
2. To assess the 'health of the home' with regard to insulation, ventilation, general maintenance and have the necessary remedial actions completed.
3. To have healthier people by having the PHN's identify and address unmet health needs from a holistic perspective.
4. To improve links with, and usage of health and social agencies such as the general practitioner, Work and Income, budgeting and counselling agencies.
5. To prevent or reduce the rates of disease and hospital admissions related to diseases such as meningococcal disease and cellulitis.
6. To provide interventions that are congruent with the expressed needs of the people and keeping families together whenever possible.

2.2.2 Quantitative and qualitative ways to identify outcomes

The outcomes evaluation of HHP was designed with the understanding that a Cost Benefit Evaluation may be undertaken in the future. Providers did some work identify

whether outcomes were quantifiable, how difficult they were to assess, and how many years it would take to fully determine them.

The following section lists the quantifiable outcomes providers identified:

- The number of 1/2/3 bedroom extensions to address overcrowding;
- The number and types of houses that have had an intervention;
- The number of families that get into appropriately sized larger homes;
- The number and types of extended family groupings accommodated;
- The changes in the standard, number and modernisation of HNZC houses;
- The number of referrals to budgeting;
- The numbers and variety of other referrals made;
- The number of times food parcels were required;
- The number of referrals to GPs for screening, immunisations;
- The number of GP/primary care visits following HHP interventions;
- A reduction in hospital admissions for conditions like cellulitis, meningitis;
- The number and variety of unmet health needs identified and addressed;
- The incidence and toxicity of mould found on internal walls after HHP interventions;
- A reduction in the incidence of infectious disease.

There were also outcomes that required qualitative rather than quantitative information, or where the impact would not be evident within the timeframe of the evaluation.

Such outcomes include:

- The uptake of cervical smears, breast screening, immunisation;
- The reduction in workload for TMs in areas where the HHP has done needs assessments;
- Substantiated changes in tenant behaviour and attitudes, such as being more house proud, building happier families, and assertiveness;

  "Giving them a tool with which they can make an improvement in their lives and that gives them the confidence to tackle another issue which improves another area of their life and then they have the confidence to tackle officialdom." [1]

- The inclusion of HHP household management plans more widely within HNZC;
- The number of agencies wanting to refer people into the programme;
- Evidence of community buy-in to the HHP;

  "The HH team was on a tour around the area they were to commence in and by chance were standing outside of a Laundromat. They were looking at a property that was about to be invited to participate when a person came out of the Laundromat and spoke with them. On learning who the team were they couldn't speak highly enough of the householders and of how deserving the people in that home were. On reflection the team were touched by the open

[1] Direct quotes from providers and tenants are in quote marks and are italicised.

unselfish approach of the person and their desire to support a local family in getting an improved home."

- Having families reconnect with PHNs when a problem occurs;

  "The father who rang asking for help to cope when his son was suspended from school and he needed to know what to do and who to turn to".

  "An elderly man who would not let his family remove the PHNs card from the notice board beside his phone, because he knew she had sorted out a major problem and he wanted her number available in case of a future problem."

- The evidence that people are staying put in their residences; and
- Evidence that there is less truancy from school-aged children.

2.2.3 Success stories

The following section includes some of the providers' stories about the impact of the HHP on families. Incorporated with the stories are reasons why the providers thought these interventions were successful.

The impact of HHP modifications can be far greater than expected and surprise both the family and the Healthy Housing team.

> *"A Pacific family of an older couple and two adult sons. The father is morbidly obese and spent most of his time in bed. The mother also had chronic health conditions. During the Healthy Housing Joint Assessment the father remained in bed and the interview was undertaken with the mother and sons in a small, airless, dark kitchen. The family were not overcrowded but problems identified during the assessment included the bath being inaccessible to the father as it was too low and small. Together the PHN and AC discussed what they could do to improve the circumstances of the family and add value to the property. As a result a wet area shower was organised to replace the bath. It was also decided to open up the kitchen/living area and modernise the kitchen."*
>
> *"On her last visit to the house following the alterations, the AC found the father out of bed, in the kitchen, and involved in family life. All in the family were delighted with the change which he attributed to being able to see the light shine through from the [newly renovated] kitchen into his bedroom. The family spoke of how their father commenced getting up and about by going to the kitchen and then out onto the new deck and then for walks around the block and more recently stopping by at neighbours to watch wrestling."*

A factor that aided this positive outcome is recognition of bathing limitations with the current bathroom set up for the older male. Another important factor is the programme's approach of looking to add value to the property by improving living flow, increasing the amount of light in the home and providing decking to take advantage of the sunshine.

The following example illustrates the importance of listening to the people and keeping families together. This woman's determination helped to confirm the programme's commitment to accommodate the special needs of extended families.

> *"Pacific family living in overcrowded circumstances, the mother was adamant she wanted to have her family at the dining table. She saw this as key to keeping her very large family together and off the street. The home was modified with her goal in mind. 'She really wanted her connection with the family and it's been a real winner'. The kids aren't out on the street. I can drive by the house now and see in pride of place, the huge dining table, through the open doors of the new deck."*

The HHP was able to undertake solutions for disabled people as demonstrated by the following examples: [2]

> *"A very independent gentleman who was a double amputee, found his wheelchair couldn't get through doors easily, the layout of kitchen facilities, etc., was for an able-bodied person resulting in his being unable to use the stove. He had previously received health funding for essential alterations to accommodate his disability. He wanted to stay in his local community. Healthy Housing solutions included widened doors, and provided a new purpose built kitchen, and an indoor/outdoor deck space where he could easily hang clothes and also use as an alternative emergency exit."*

In this case whilst his 'essential' needs had been met by Ministry of Health (MOH) funding the HHP was able to add value. Another example of how the HHP was able to add value includes doing extensions greater than what would be deemed 'essential' by MOH for a disabled person enabling them to undertake their house-husband roles more effectively and safely.

> *"A man with severe disability who can't use his wheelchair easily inside because it can't fit through doors so he moves himself around the floor using his hands. But then everything is out of reach, e.g. light switches and door knobs. He is at home all day caring for his preschool son whilst his wife is at a course. To cook, he gets up on an office chair with mini wheels but is unstable when leaning over at the stove. As a result of the Healthy Housing intervention he got a purpose built house within his local community*."

The needs of a person deemed to be 'palliative' were likewise addressed by HHP in a way that added value (ease of movement) and comfort to their life.

> *"A family living with a young man who had serious chronic health problems. The home needed to be comfortable, functional and allow easy wheelchair movement. The solution in this situation required the team sitting with designers to discuss his special needs, e.g. a double room with easy indoor/outdoor flow. Plus getting padlocks on the fridge for medication safety, and providing a couch for comfort."*

[2] Ministry of Health (MOH) funding for alterations to address a disability are limited by what is defined as a disability, (Diabetes, Obesity, Chronic Obstructive Airways Disease are excluded) it is also not for palliative situations where life expectancy is limited < 6 month and must fit within $200 – $7,900. Any alterations funded have to be deemed essential, i.e. alterations can be made to allow external access via the one door but will not cover access via a second door.

Some of the interventions mentioned above were small yet vital and addressed safety concerns.

The HHP was able to use the clinician's report to demonstrate the extent and implications of a sewerage problem for family health and thereby put pressure on sub-contractors to find more permanent solutions to previously unsolvable problems:

> *"A home that had sewerage problems that had had many temporary 'fixes' that had never been permanently successful. This problem was identified during the Healthy Housing Joint Assessment. The clinician's subsequent comments indicated the risk to the health of the tenants and absolute urgency that the problem be addressed, resulting in the problem finally being successfully completed."*

HHP was able to keep an extended family together which ensured that a young couple had the support she needed when their first child was born in an environment that was not overcrowded. The following example also shows the creative approach HHP takes to accommodating tenants' requirements:

> *"One household had 15 residents. The home was unable to be extended upwards because of city council zone restrictions and the section was not big enough to do a level extension. Within the family group was a daughter and son-in-law, she was pregnant. The PHN knew that once the baby was born the risk for the baby in such an overcrowded house would increase dramatically. Whilst it would make sense to transfer that small new family unit out, it was realised that she needed the close support of the extended family. Solution came by using two homes on a corner section across the road and extended both homes into a single unit with the result of addressing both the overcrowding and keeping all the family together."*

Very simple solutions can solve a person's greatest need. The impact of HHP illustrated in the following example was the prevention a falls that results in injury:

> *"An elderly lady with partial vision, whose biggest problem was falling on the drive at night. Her main wish was to have outdoor lighting for safety. The HHP put in security lights which illuminated the driveway and solved her problem."*

Changes that occur can possibly change life for this generation and the next as these next two examples show when families reconnect with education because of their housing changes and the children are no longer in trouble:

> *"A family where home in a mess, kids unruly, truanting and on the streets. HHP intervention resulted in transfer out of area into larger home with a purpose built sleep-out for big kids. Twelve months later the home is immaculate kids are out of trouble and no longer truanting, and the AC is invited in for a cuppa."*

> *"Couple with six children, home was extended by two bedrooms and a living room. Now the kids are at home, doing their study and now the mother is studying as well. They were really overcrowded. The kids didn't want to go home when there was no space, so they would go out and mix with the 'wrong sort of kids'. Now they have space at home."*

The health risk of lead based paints used years ago was revealed by the PHN noticing the clues to the existence of the problem and dealing with it:

> "*Jonny, a toddler. During a Joint Assessment inspection, PHN noticed as they walked around that all the window ledges, which were very low, had been chewed. On talking with the parents she found that little 'Jonny' had been the nibbler. The PHN knew that lead based paints taste 'sweet' and suspected this may be the reason for 'Jonny's' strange diet. She discussed the case with the clinician and as a result the child was tested and found to have lead levels above normal but fortunately not yet in the toxic range. The family was transferred to a more appropriate home where the window ledges are all at the usual height and 'Jonny' is no longer nibbling."*

In order to achieve the success stories and therefore positive outcomes the HHP assessment team demonstrated: good communication skills, cultural awareness, nursing expertise, proficiency in the advocacy role, partnership approach and collaboration both internally and externally.

Attitudes that contributed to success include: their friendly approach, being non-judgemental, and not threatening. Giving the impression of having time for the person to tell their story was important as was their attitude of starting fresh each time they met with a new family. Coming with a blank slate and focussing on the families needs from a holistic perspective assisted the team in 'working with and not doing' to the family. Being culturally sensitive also made them more acceptable. All team members have a strong commitment to an advocacy role ensuring people are not disadvantaged and know what they are entitled to.

Communication was a key factor and many stories reveal how the team focussed on building effective rapport, listening, establishing what was most important from the families' perspective. They also used interpreters to ensure families understood and were understood.

The expertise of the PHNs enabled comprehensive assessments and action plans to be developed. They complement their communications skills with observational skills and reflective practice to ensure they identify all the relevant issues. They find opportunities in their interaction with households for informal education input to address the issues identified.

2.3 Obstacles to the HHP

The main obstacles to the success of the HHP that emerged from discussion with the service providers include the availability of ongoing funding, the impact on and relationships with HNZC Neighbourhood Units, 'no shows' by tenants at the assessment meetings, the risk of recurrence of problems, and delays to the process. Other obstacles identified include legislation that impacts on the programme, building restrictions, the impact of market rent, staffing resources and unaddressed needs.

2.3.1 Ongoing programme funding

The risk of reduced or cessation of continued funding for the programme is a concern of Project Managers.

> *"This year's HNZC budget is half of last and the following year currently has no budget allocated".*

> *"HNZC and DHBs have differing funding rounds, (i.e. when one sector may have some budget available, it's unlikely the other will too)."*

The impact of reductions in funding would be to reduce the number of households HHP could assist and reduce the range of interventions that could be undertaken and the rate of interventions[3].

2.3.2 'No shows'

The HHP team indicated that up to 20 percent of the arranged Joint Assessment home visits by the PHNs and ACs may result in a 'no show' or 'not at home' by the tenants. The providers indicated that there are many reasons for this including non-delivery of mail inviting the tenant to participate, tenant reluctance to open HNZC mail, unpredictable employment opportunities, or unavailability due to their hours of work, information is provided in English and wariness of having HNZC visit.

> *"One area involved has a history of having approximately 30 percent of mail not delivered, which the provider says relates to poor letterbox design, the amount of junk mail deliveries, and mail theft."*

> *"Mail from HNZC (using official stationery) inviting tenants to be involved in HHP seen as officialdom and tenants often don't even open the pack."*

> *"A bus drives around (the area) early every morning and collects them, so with increasing employment opportunities the people don't know if they will have a job tomorrow."*

> *"If have a job they are only on basic rate and lose money if take time off to attend assessment."*

Strategies the teams have used to reduce 'no shows - not at homes' include:

- Encouraging tenants to open mail sent to them by HHP by having hand written onto each envelope "Important appointment - open me!"
- Sending out a reminder letter one week before appointment; and

[3] Fieldwork was undertaken in 2005 before the election and providers wondered what the outcome of the forthcoming elections might mean for the programme.

- Having PHNs pop around to the house before the appointment to briefly connect with family, check scheduled time is OK and give brief overview of the HHP, as a way to counter defensiveness and wariness of the tenants.

'No shows' impact on the programme as they tie up team members and delay a visit to the next family who meet the criteria and want to be involved. Any spare time is used to drop by and introduce the programme to the next families as well as following up on previous action plans and referrals. The team have considered alternative meeting times but have yet to come up with an acceptable alternative or way to reduce 'no shows':

> *"They had safety concerns related to night visiting as well as it being 'not appropriate as evenings are meant to be family time for Pacific peoples and Saturdays no longer a day people likely to be home."*

2.3.3 Recurrence of original problems

The risk of recurrence of original problems identified at the Joint Assessment is another risk to the success of the HHP, with the reported problems mainly centred on re-crowding, care of the property and house keeping skills.

Re-crowding:

The team proactively discusses HNZC's expectations of sustaining an uncrowded household with each family. The reasons for the overcrowding policy are explained along with the link to disease and poor health. 'We need to sustain non-crowding, as this is a core role of a TM'. During the Joint Assessments crowding is a key area and this becomes part of 'an agreed HAP'.

Poor house keeping:

This is an issue all providers commented on. It is being addressed in the CMDHB area by using a Samoan CHW. She operates under the supervision of the PHN to assist the mother with the development of skills and strategies to better manage the homemaker role.

> *"Often there are multiple problems such as overcrowding, solo parent, on the benefit, low motivation, depression and poor housekeeping. We need a housekeeping service to support these people; it should be a core part of HNZC. As a team we need to do constant follow-up checking that homes are clean."*

> *"The CHW follows-up the action plan as requested by PHNs, doing housekeeping follow-up, she ensures they realise that she isn't there to tell them how to run their home, is supporting and encouraging."*

> *"I [CHW] went into a home where the housekeeping was really bad. I don't give any indication of the smell, 'just pretends its not there'. Chat with the mum in a mum-to-mum way, from the perspective of not wanting your kids in an untidy home. Breaks the job down to just*

having them start with cleaning up one thing, i.e. the stove, then maybe mopping the floor, starts small and works towards the big stuff. Revisits every fortnight - then monthly encouraging and acknowledging improvement. Gives the mum time to just talk and be a listening ear. Over the time the CHW has been involved the mum now looks 'happy', is more focussed and the daughter is now back going to school."

Care of the property:

The contract managers report that often the recurrence of ventilation problems arise due to misunderstandings of the purpose of ventilation and its relationship to poor property upkeep. For instance:

"Many new residents feel the cold and equate passive ventilation with cold and block off the ventilation strips or run clothes driers with the flue blowing into the living areas, unaware that they are contributing to the very problem they are trying to solve."

One of the impacts of HHP has been that tenants take pride in their houses and therefore care for them better. For instance:

"When he first started in the HHP he did an informal survey, reconnecting with 25 homes by cold calling. Out of 25, 23 were home and happy to be visited, all very proud of their homes, only 3 homes were in any way unkempt."

2.3.4 Neighbourhood Units

HNZC's Neighbourhood Units carry out the ongoing management of HNZC housing stock, allocation and tenancy payment. Obstacles to the HHP identified during the provider interviews include the impact of the workload created by the HHP on the TMs, turn over of TMs, an insufficient stock of large houses and unaddressed maintenance problems.

The impact of the HHP on Neighbourhood Units:

TMs have reported to providers that "*staff workloads don't allow time for the HHP".* This can give rise to 'negative perceptions' due to the belief that the HHP *"increases their workload"* because they have to *"do the fixing up identified by the HHP". "The HHP relies on regional Neighbourhood Units to undertake ongoing maintenance."*

The turnover of TMs:

The turnover of TMs means the HHP team needs to *'get buy in'* to the HHP with each new TM:

"It takes time to build the relationship, for them[TM and ACs] to work effectively together."

There is variability in the services provided:

"All the regional offices have different ideas on how to do things, e.g. who does what when."

Unaddressed tenancy issues:

Unaddressed tenancy issues impact on both the HHP and tenants. A provider spoke of situations when a '*needs assessment for transfer not being done by Neighbourhood Units because they leave it until the HHP gets involved*'.

Other issues identified related to '*TMs not addressing long term maintenance problems'* and tenants perceptions that *'long term maintenance problems will be dealt with only when they had paid their arrears'*. [4]

Uncompleted maintenance can lead to the negative impression tenants have of HNZC. The contract mangers note that:

> *"Often they either have never known of the problem or the sub contractor was unable to get in to the property to do the necessary work. Tenants not having phones and language barriers can complicate connecting with tenants. If they can't gain access on the second try the job is cancelled and there is no follow up. It is presumed that if the problem persists the tenant will reconnect with the TM for the process to be commenced afresh."*

Appropriate housing stock:

Insufficient large homes for extended families is an ongoing issue the HHP team experience, especially so in areas undergoing community renewal.

Strategies

Strategies being attempted to address these issues include the HHP becoming more self-sufficient by having ACs doing all needs assessments and being able to let the contracts for some ongoing maintenance issues identified. It was suggested that each new TM have an orientation to the HHP. The aim being to increase the TM's understanding of why the programme exists and give them the opportunity to hear positive outcome stories.

> *"Once they understand the purpose of the programme they become enthusiastic. The programme needs to be more 'proactive in publicising experiences of how things change."*

2.3.5 Delays to the HHP process

Delays to the HHP process present another obstacle reported by service providers. The impacts of these delays mean the family takes longer to be resettled in their extended, modified or new home. The main causes of delays were related to the council building consent processes, and delays occurring because of OT availability to undertake the required disability assessments.

[4] The contract manager responded to this misconception stating that issues to do with arrears and maintenance are kept completely separate and one does not influence the other.

"OT is excellent but lack of availability delays the Healthy Housing process."

One area has a two-month OT waiting list for non-urgent referrals. The other area currently sees new clients in half the time, both will prioritise urgent cases if their attention is drawn to the fact by the programme team.

The OTs reported on some initial problems they had working in with the HHP because they had not been given an orientation to the programme and so didn't know what the programme needed from them. Once a meeting had been arranged to update them on the purpose of the programme as well as the identification of programme referrals, the OTs were able to assess the person and send the required reports. Whilst aware of the needs for client confidentiality they reported on instances where not receiving the full assessment done by the PHNs meant they had to redo the information gathering. They also mentioned that feedback from the programme rarely happened.

> *"We don't get a copy of the assessment they do, the client said they had just done a huge twelve page assessment with the PHN but it wasn't shared with the OT and the person was frustrated that the OT was then asking the same questions again sometimes not too long after they had just been through the HHP assessment."*

Council zoning restrictions may limit in-fill or extension options. The contract supervisor reports that the time taken to get a building consent has increased from 4.1 days early in the programme to almost 50 days now.

2.3.6 Market rents

A further area that impacts on the HHP and tenants is that of market rents/income related rents. The legislation involved in this process is complex. There are also policy implications with regard to what is a core family and accommodating extended families. As the HHP Project Manager noted:

> *"The calculation of income related rent (IRR) is complex. IRR is based on net income, including income tested benefits, of the tenant, their partner and others on the tenancy agreement. Where the calculated IRR exceeds the market rent of the property tenants will pay market rent. The majority of tenants are on IRR and will not pay more rent for a larger house unless their income circumstances change. Tenants on market rent will pay more for a larger house. Part families moving to another house will pay their own IRR or market rent on that house."*

2.3.7 Other obstacles

The HHP team also has to cope regularly with situations which don't fit the HHP criteria, either because the household is only overcrowded by one person, or some of the people in the house are non-residents and thus aren't counted in the home's occupancy tally when applying the CNOS occupancy ratio. The team reported instances where the non-residents were unwell and requiring health care, which added significantly to the financial burdens, experienced by the tenants.

"Pacific Island families looking after older/frail/terminally ill family members who aren't NZ residents. These people aren't entitled to any benefits or free health care, which complicates already difficult financial situations for these families."

Other issues related to staffing, for example, the need for more CHWs to extend the housekeeping support role. As well as for secure contracts for the PHNs, some of whom are currently on fixed-term contracts. Issues with regard to staff safety when doing home visits - PHNs have had safe home training. Strategies have been set up to cover the eventuality of providers needing to supervise/support each other or vacate a house due to safety concerns.

Several health providers mentioned the need for improved health input into design solutions:

"Health needs to be kept in the design loop more. We say people aren't to smoke near kids and should go outdoors if smoking; then we need to provide shelter outdoor where they can smoke."

2.4 Evidence of collaboration

Collaboration occurs at many levels in the HHP. The following section describes the collaboration that occurs both internally with HHP, and within HNZC and the DHBs, and externally in the housing and health sectors.

2.4.1 Internal collaboration between the HHP's HNZC team and the PHNs

Collaboration within the HHP is evident at all levels and in multiple ways. Managers from both sectors have a common vision and have worked together on developing the programme and processes. Many methods of communication are used to keep programme members up to date, seek input and give feedback. They also have the regularly scheduled programme and action-plan focussed meetings. Other aspects of collaboration include the culture of partnership, for example, from the beginning of the programme the *'assessment tool was developed together with input from both HNZC and PHNs'*. They also work together to pool their knowledge to solve problematic situations.

"*Both the AC and the PHN develop an action plan and subsequently meet informally in the car/office, review each other's plans and come to agreement of a joint action plan detailing what needs to be done from both housing and health perspectives - getting sign off by both. Both parties then exchange copies."*

2.4.2 Internal collaboration within HNZC

Collaboration within HNZC includes the HHP team liaising with the Acquisitions team, Special Projects Unit, Region Placement Officer and of course the case managers and TMs in the Neighbourhood Units. All of the housing team could quickly list all the services they regularly collaborated with within HNZC. They did not give detailed stories as did the nurses; it was the external collaboration that they shared in depth about. The housing team stores all their assessment information in a database which is used to record action plan decisions, track progress and provide reports.

2.4.3 Internal collaboration within DHB health services

The PHNs liaise and refer widely within the DHB and the most common referrals are made to:

- *Diabetes clinics - refer those who are unclear how to manage diabetes in an ongoing way and those who have symptoms of progress of the disease who have not had follow ups;*[5]
- *OT - referrals mostly for mobility issues and modifications of houses for people over 65 years. A range of referrals, many of them for hand rails installed by toilet and at front or back doors right through to house modifications required for people in wheelchairs, e.g. water lift installed to allow access into the house, widening of corridors, etc. Often referrals are generated as a result of falls in the house and around the property;*
- *Asthma educators - referrals are made mainly for children when there have been ongoing problems, e.g. repeat use of the nebuliser or GP visits needed, or better day to day management and support required;*
- *Breast screening - referrals for those who are in the required age group and are due for or never had a breast check up or who have a relevant family history;*
- *Cervical screening - women referred when they are either overdue or never had a smear or who have a relevant family history;*
- *GPs - referrals typically include: immunisations, smears, unresolved health issues, e.g. skin infections, gout or other chronic conditions that need medical attention;*
- *Immunisation mainly under 5 MMR, complete the MENZ B vaccine programme, or missed BCGs, Hep B, etc.; and*
- *Well child – Plunket, ADHB child and family.*

The project managers have processes in place for requesting assistance from Mental Health Services as needed, at times this is required urgently at a PHN's request and the system works effectively.

Health also has developed a database that collates assessment findings and interventions, which is used for project reporting purposes. They are very careful to respect privacy/confidentiality issues when sharing information. The Auckland PHNs have created a shared spreadsheet which lists all families who require OT input. It has space for housing, health and OT to note who is involved, briefly what is being done and the

[5] These comments provided in written communication by project manger ADHB

expected time line. This is updated monthly and proved to be a useful communication tool.

2.4.4 External collaboration - health

The PHNs liaise and refer widely within the health sector and the most common referrals are made to:

- *Dentist – nearly all children, mostly for children who have never had a dental check up, often referring young adults to enrol with dentist and to get a check up before they turn 18 yrs (stops being free), rotten teeth. Adults reluctant to be referred as it is too costly – one woman removed her own teeth with pliers.*
- *Smoking cessation referred only when person ready to go – PHNs often use the contemplation pre-contemplation cycle to assist client with the most appropriate support for them.*

2.4.5 External collaboration – other organisations

The PHNs make referrals to external services the most common of which are: budgeting, food parcels, Work and Income and IRD.

> *"Some basic budgeting advice is offered by the PHN however for more serious budgeting issues and families struggling with debt are referred to local budgeting services, e.g. CAB or Baptist budgeting service."*

The providers spoke of one service that went to people's homes to give budgeting advice.

> *"Families who have no food in the house when the Joint Assessment occurs are referred for food parcels."*

All spoke of ways they attempt to address poverty with food parcels and advice on nutritious cheap cooking options. They also have found creative ways to get extra linen and towels for the households, and liaise closely with places like the City Mission for bedding and furniture.

The development of key contacts with Work and Income has made contact between the programme and Work and Income more effective. The key contacts know what the HHP is all about and are now more aware of the impact of chronic illness.

> *"Work and Income mostly for families who are entitled to Child Disability Allowance and community services card. Often refer families to access 'one-off funding', e.g. help to buy school uniforms, towels for family with skin infections, washing machine, etc."*

The Joint Assessments revealed that most tenants (80-90 percent) in South Auckland were not getting their full benefit entitlement.

> *"IRD getting entitlements for working for families, family assistance and child support."*

> *"Referrals do not happen in isolation, for example, families who have no food in the house may be referred to several agencies so that their situation can be remedied, e.g. referred to food parcels for immediate assistance and PHN also investigates if they are getting the correct benefit entitlements, if not refer to Work and Income and to budgeting. Sometimes they will be referred to one agency who can be an ongoing support or advocate for the family, e.g. Sisters of Mercy."*

There are a range of other types of referrals made which may not be as common as the referrals above but are important and include[6]:

- *Enrolling children in early childhood education- culturally specific centres are available;*
- *Ensuring school attendance – e.g. referrals are made to Tamaki Pathways to follow up;*
- *ESOL courses;*
- *Green prescription – for a local exercise group particularly for those with diabetes, obesity, smoking cessation;*
- *Child, Youth and Family – when abuse is suspected;*
- *Victim support for those who have been burgled or who are dealing with trauma issues.*

The providers reported on instances where their managers took initiatives that aided in the inter-departmental collaborative process.

> *"At JA of a home with sole parent and 6 kiddies they found the adult to be seriously unwell with untreated mental health problems. PHN was able to connect back with manager via mobile phone whilst at the residence and get assistance from mental health actioned immediately and get CYF directly involved caring for the children."*

> *"Family were assessed as not officially being overcrowded as they had an 18 year old non resident relative living with them. He had come to NZ specifically to assist in the care of the significantly disabled people living there with whom he had an excellent relationship. Following the Joint Assessment with the assistance of the clinician contacting immigration, the young man was granted residency and house modifications were undertaken to better accommodate the needs of the disabled people, we [PHNs supported by Project Managers] were able to give them an environment that enabled them all to cope better with the situation."*

> *"Sometimes we extend our interventions to include key external agencies and to address an issue on a larger scale. There is a significant cockroach problem in a neighbourhood we are currently working in. While HNZC sees this as the responsibility of tenants it is costly (approx $100). We [PHNs supported by Project Managers] have contacted the environmental health manager and community development worker at Auckland City Council to see if there is a community wide approach to this problem, not just relying on individual household solutions. Ongoing discussions are needed but the community development worker has said she may have some funds to put towards a community solution.*

[6] The following comments were provided in a written communication by project manger ADHB

"Falls have been a significant problem so we [PHNs supported by Project Managers]have recently arranged a meeting with Accident Compensation Corporation to discuss what they can do on a larger scale – or how we can collaborate with them. Safe Kids may also be invited."

2.4.6 Ripple effect – collaborations that follow on

OTs discussed the ongoing collaboration within the health sector that then occurs as a result of their receipt of a referral from the programme for assessment of a disabled person.

'OTs have been a great link with other services. 50 percent of the people we've seen have needed other referrals to, e.g. physiotherapy, gerontology nurses, dietary, speech language therapy and continence.'

A positive outcome of the collaboration between OTs and the HHP is that the OTs are now able to get involved in preventative health care.

'Nice to work in prevention, usually we are at the bottom of the cliff, now we are getting in before the deterioration, e.g. before the fall that resulting fractured hip and hospitalisation. We have had a lot of referrals for people that we wouldn't have known, of for quite a time. Most probably not till the person got too frail. This way we get in and do safety rails, and get the physiotherapist involved in mobility assessment and falls prevention so accident doesn't occur.'

2.5 The impact of the HHP

Evidence of strategies the HHP has instigated to maintain the impact of the programme has been touched on in the obstacles section, with the issues of re-crowding and housekeeping skills. Other themes that show evidence of sustaining the HHP impact include: supporting the families in the development of housekeeping skills; ongoing care of the housing stock; addressing health issues; and lifestyle changes.

2.5.1 Supporting the families in the development of housekeeping skills

An example follows of assisting a family where poor housekeeping was identified and where better maintenance of their home was included in the action plan:

"Two families living together. Several of the children had health problems requiring hospitalisation. The Joint Assessment identified several major issues, e.g. overcrowding, inadequate benefits as well as needing budgeting and housekeeping skills. The main family was transferred to a transition home whilst extensions undertaken. The other family were moved into their own home in an area they chose. The mum can now see the difference of living in a fresh tidy environment at the transferred home and the CHW has been doing support visits to

encourage development/maintenance of house keeping skills. Shifting the second family out reinforces the importance of not allowing re-crowding to occur."

2.5.2 Ongoing care of the housing stock

Care of the stock long term is a focus of HNZC and the ACs now *'go back at six weeks, and are considering returning at six months and one year'* to reiterate the importance of the overcrowding message, review the ongoing need to care for the house and giving the family the chance to raise any issues.

2.5.3 Addressing health issues

The following comments were provided in a written communication by the project manage from ADHB:

"The PHNs reported on the most common issues that are discussed with families and the information they subsequently provide. At least two of these issues below are discussed with every family visited – but may not be referrals – depending on the situation.

- *Damp;*
- *Cold – heating, unflued gas heating – majority of families appear not to use any heating;*
- *Mould – ways of cleaning it – what to use, etc.;*
- *Condensation – strategies for reducing it;*
- *Cockroaches – Huge problem for a lot of tenants – some identify this as their most significant health issue;*
- *Rubbish – clearing of inorganic rubbish;*
- *Skin infections – prevention and care;*
- *Meningococcal – discussed with every family;*
- *Eczema;*
- *Smears;*
- *Breast screening;*
- *Nutrition;*
- *Parenting;*
- *Car seats;*
- *Electricity to garages – residual current interruption;*
- *Budgeting;*
- *Dental.*

Other common problems identified included falls and burns:

- *Falls – a huge number of falls in the past year – mainly adults at back and front steps, tripping up – usually older people and often referred onto OT; and*
- *Burns – both children and adults."*

2.5.4 Lifestyle

This aspect of the HHP includes people commencing study towards higher education or skills, employment opportunities opening up and linking in with the community.

> *"Linking someone into a green Rx programme, this may increase their exercise, and may reduce their chances of getting or worsening their diabetes, but it may also link them in with a supportive community network."*

> *"Getting families that need it into larger homes. Then they aren't as stressed. That people are able to achieve a quality of life, more than just the physical that is sustainable long term."*

> *"Giving them a tool with which they can make an improvement in their lives and that gives them the confidence to tackle another issue which improves another area of their life and then they have the confidence to tackle officialdom".*

2.6 The sustainability of the HHP

Themes identified during analysis supporting the sustainability of the HHP include the leadership style and management approach of the HHP's managers. Equally important was the way the two services, housing and health, work in partnership on the programme. It was apparent that the attributes and attitudes of team members, and a very strong strengths-based solution focus are key factors in their approach to the programme.

2.6.1 Leadership approach and management styles

The leadership approaches and management styles of the HHP are reported by the providers as strong contributors to the sustainability of the project. As leaders of the programme the managers from HNZC and the DHBs are all totally committed to the project. They started the HHP with a shared vision and present a unified approach. The HHP team recognises and appreciates this approach and draw strength from it. All are encouraged and supported by the 'enthusiastic' support the programme receives at an executive level from both sectors. As leaders the managers recognise the bigger picture, and use this knowledge to address issues that can only be addressed at higher levels, for example, CYF placing foster children in overcrowded houses. They mentioned how they use their HHP involvement and experiences to complement their other leadership roles.

The management style is very hands-on. The managers have a focus on quality improvement, evaluating what the referral uptake has been, and the impact of 'no shows'. The nurses are supported by the strong commitment their managers have for the continued inclusion of their expertise within the project. Team members report they are supported by safety strategies such as 'unsafe home' and provision of supervision. The providers all acknowledge with humour that '*if any problems are experienced with outside agencies they just mention to the agency that they'll report it to their manager, and that's enough for the*

problem to be immediately sorted' When a need is identified by the team the managers work to solve the issues as practically as possible. The provision of speaker phones they can take with them to homes to connect with interpreter services as needed is an example.

There is a flat management structure which is evident with all team members having an equal voice. All are expected to contribute to the regular joint planning meetings between the two services where any points raised are addressed collaboratively until a situation is resolved.

2.6.2 Partnership approach

All providers spoke of how partnership is central to the HHP. Specifically from the perspectives of team work, how it occurs, and what is done. When talking about team work they were referring to *'working with the other services as a team to achieve the same goal'*. The providers gave no sense of us-against-them frequently speaking of *'our people and their people'* and it being a good team where every one is together.

They recognised that their partnership perspective is unique. They spoke of the attitudes that reinforced this perspective namely mutual respect, 'so important for the nurse to be there' 'learning from each other', commitment, same goal, and trust. They recognised that 'whilst they have different jobs they have the same reason for being involved'.

Another factor that sustained the partnership approach was that from the very beginning managers of both services had worked together on how to make the HHP work. The assessment tools were developed together and the actual project processes (e.g. the joint visit to the home to do the assessment and acceptance of the action plan and agreement on final decisions) all occur together with equal responsibility and accountability.

2.6.3 Attributes of Team Members that contribute to sustainability

The attributes that contribute to the sustainability of the HHP include the team members' skill and experience; the way each team interacts with the other, their focus on improvement, as well as their communication skills, ability to build rapport with the tenants and personal attitudes that support the programme's goals.

Almost all interviewees at some point in their interview spoke of the passion they had for the programme, belief in the programme and their commitment to it. There was a sense of social responsibility and 'making a difference' by thinking beyond self in seeking to assess and plan interventions in a holistic way. So strong was this perspective that it was mentioned that if new team members didn't have a similar approach they would be unlikely to remain on the team.

Skills considered vital for team members include being able to build and sustain effective relationships with other agencies, being able to build rapport in the face of wariness and to gain the confidence of the tenants, to be non-judgemental in their approach, as well as having good listening skills *'to be able to hear what is said and unsaid'*. Complementing these

skills are the ones that are needed to sustain their strengths-based solutions focus namely being *'detectives'* and *'jacks of all trades'*.

In addition the experienced PHNs had specific skills and expertise in health, health assessments and community knowledge that were central to the success of their role. This enabled them to assess the family from a holistic perspective, plan interventions, provide opportunistic health education and refer to a wide variety of services.

All interviewees spoke of the way they worked together, their respect for each other and for the special skills members of each service bring. One interviewee spoke of *'the willingness all had to walk in each others shoes'*. They spoke of their working together using terms like *'same song'* and having *'same dreams'* to describe their common sense of purpose of achieving the best for the family.

Their approach to the challenges encountered in the implementation of the HHP supported their determination to find solutions. Many shared incidents where they had been *'willing to do things differently'* or *'think outside the square'* as a way of coming up with new ideas and ways to address the situations they encountered. The PHN's in particular gave examples of how they used reflective practice as a way to ensure they weren't missing clues as they followed up on assessments with action plans.

2.6.4 The impact of a 'solutions focus'

The interviewer was struck by an all pervading 'solutions focus' during the provider interviews. This focus gives strength to the sustainability of the HHP because ACs, PHNs and their managers work together finding ways of addressing issues and making things happen always building on people's resources and motivation. This was delightfully illustrated by the following quotes:

> *"If a door closes we jump through the window!"*
>
> *"We are detectives, if there is a solution to be found we will find it, we bounce ideas off one another."*
>
> *"The PHNs have created a resource file that's easily updated and enables them to be consistent in the solutions offered. And share resources they have identified like the 'Gout' educator nurse who the PHN was delighted to have found."*

'The HHP has a focus on solutions.' The HHP team are *'jacks of all trades'* who *'like to face challenges'* and sort out problems by *'thinking outside of the square'*, *'continually seeking to fill needs and find new community support agencies or health services'*. Both services work together creatively for the best of the family.

> *"We will work with and around systems. We don't take no for an answer."*
>
> *"Working with families not doing to families. We are prepared to improve how it is for clients' finding a solution together."*

This solutions focus influences the HHP initial approach to tenants. The HHP doesn't take a non response to the invite to participate in the programme as a decline in the first instance. They follow-up with further contact and a drop-by door knocking visit. It also means that if no interventions or referrals arise out of an assessment they recognise that: *'We need to go back and re-assess to get the whole story. It is very rare to not encounter any issues.'*

HNZC work together with the PHNs to get what is needed for the programme to succeed. Fortnightly joint meetings are held with HNZC, PHNs and the PHN manager where they discuss new cases, issues identified and update on progress of current cases, and creatively seek solutions if problems are identified.

> *"A family with two disabled wheelchair-dependant children who have an ultimately terminal condition. The Joint Assessment was undertaken and both services identified what interventions were specifically needed and together worked to get the best solutions."*

This commitment/philosophical approach to finding a solution means if there is a problem identified during the joint meeting, '*we won't leave the room till we sort the problem out; it's a joint process'*.

The HHP team go into each new assessment with a blank slate approach so that they can find the issues facing each family and work with them to find a solution.

A key question the PHNs have found useful is 'what's your biggest family/health issue right now?'

> *"If we don't ask this we will miss the whole point of doing an assessment - that's where their energy is. It gives the people permission to talk about what's bothering them. The families come up with real problems like the cold, cockroaches, debt and children's health. If we try to focus on too many problems it doesn't work, we focus on most important first."*

> *"Family who have multiple agencies involved but no effective liaison between all the agencies such as mental heath, respiratory, disability. No one had asked the family what their major need was. Services had just kept trotting in the door but had been missing the vital issue for the family. The family needed more room to deal with their overcrowding once that addressed then they had energy/ability to address other issues via referral to 'Strengthen Families' service."*

The HHP has gone outside the normal scope seeking creative ways to manage when usual disability services can't resolve issues:

> *"Family with a young man who had serious chronic health problems. The home needed to be comfortable, functional and allow easy wheelchair movement. The solution in this situation required sitting with designers to discuss his special needs - easy double room and easy indoor/outdoor flow. Plus getting padlocks on the fridge for medication safety, and providing couch for comfort."*

All facets of the HHP approach have this solutions focus:

- The paediatrician who does the clinical review of all action plans may sometimes come back and ask specifically about an issue, i.e. what did you do with this and redirect the interventions.
- One of the HNZC team is called a Solutions Coordinator and she works with the ACs doing financial needs assessments, sorts out documents and gets supporting proof of residency after overcrowding is established. She identifies what housing needs are, for example, if family plus another family consider second family transfer or move to private sector home ownership, or house extension if able, or else go out and buy for a specific household.
- Effective management support when a need is identified that will enable HHP to be done more efficiently, for example, the provision of speaker phones so that the interpreter service can be used during assessments.

Team members spoke of noticing, during the walk-through that occurs as a part of the Joint Assessment visit, that many households were sharing a single towel and leaving it discarded damp. The PHNs drew attention to this as a risk factor for skin infections and admissions for cellulitis. In an attempt to solve this issue the team sought ways to get more linen. One AC was particularly successful.

> *"The nurses 'can get stuff, or we get stuff - if neither have it we work out how we can get it': Need towels so that families can keep each person's linen separate. Rang around laundries and hotels to find out what they do with linen they no longer use; get it sent to them to hand out. Need curtains to cover windows or else blankets that should be being used on the beds to keep kiddies warm are being put up as curtains. Rang around and found a company willing to sell at discount price."*

Another example of a focus on solutions has changed the way children with impetigo are identified, assessed and treated in general practice:

> *"This occurred when the PHN noted children with 'leopard skin' scarring as a result of multiple episodes of impetigo. Whilst some had been seen by the GP the underlying issues, i.e. anaemia, wasn't being addressed. Problem was discussed with the clinician and he instituted GP training."*

2.7 Provider summary

This chapter explored the HHP's successful outcomes from the providers' perspectives. The stories shared by the providers demonstrate successful outcomes and why these successes occurred. The programme has a high level of collaboration at all levels, namely between the project managers for HNZC and the DHBs, between HNZC and the PHN's, internally within both agencies, and with multiple external agencies. Changes begun by the programme can be sustained by preventing re-crowding, improving housekeeping skills, supporting life style changes and addressing health issues. Sustainability of the programme is supported by the leadership style and management approach, the partnership perspective, team members' attributes and a very strong strengths-based solution focus. Obstacles include the impact on, and relationships with, HNZC neighbourhood units, 'no shows' by tenants at the assessment meetings, and the

risk of recurrence of the original problem. These findings are incorporated into in the evaluation summary chapter.

3 STORIES FROM THE HOUSEHOLDS

As background to the thematic analysis of householders' stories, interview staff were asked to compose a short summary of their impression of each household they visited. These aim to provide a context for understanding the households – who is living in the home, what has happened with the HHP, and the circumstances the households face.

Story 1

'This four generational household is led by two industrious parents with cultural connections in the Pacific Islands. They have six children and the children's grandfather also lives with them. They are proud grandparents of their grandson who lives with them part-time. Until the end of last year this household of nine lived in a three-bedroom house that was described by one member as 'very tight', with the crowding making it hard for everyone to get along.

In 2004 a three-bedroom house was purchased by HNZC and extended to suit this family. Extra bedrooms and a new bathroom/toilet were added and the living area opened out with a new kitchen area. Extra space has enabled the household to host church meetings at home as well as extended family gatherings. The parents say the family is much happier, and the father much relieved to have this assistance – he works three jobs and his income alone supports the household.

The mother of the household has chronic health issues that require her to have frequent rest and assistance with some tasks. Grandfather now has his own room and bathroom, and since contact with the HHP, has aids for living installed to support his independence and personal hygiene. The household remains a very busy one, with the usual stresses and strains of parenting teens.'

Story 2

'The interview was held with a solo mother taking care of six children who are between the ages of 6 and 21 years old. Two of her children are living with disability. They have lived here for 5 months.

The HHP has enabled them to up-size from a smaller house to a bigger residence. The mother was quite happy with the move because the house is bigger, however she is not happy that the house is a leaky home. This makes life uncomfortable for the family because they always have to clean up the leaks.'

Story 3

'The participant was a very friendly person. The lounge/dining area was very tidy and clean. The open plan kitchen also appeared to be very tidy and clean.

The participant was extremely pleased with the house. She said that since they have been in their new home the relationship between members of the family had improved immensely and everyone was happy. One of the main contributing factors to the improved relationships of family members was the size of the house since HHP – five bedrooms, and a large open kitchen. The parents and the older children all have a room of their own. The younger ones still double up. This has given the older children their own private space, where they can listen to their radio without bothering anyone else. Having two bathrooms and two toilets is a huge benefit to a household that has so many young occupants.

Having a separate driveway to the house has also eased a lot of anxiety that they used to feel at the old house. Now they don't have arguments with the neighbours about moving cars to get in or out, and do not have the worry of their children's safety as they did with a shared driveway. The health of the children is now much better, and the children had fewer colds as the house was much warmer and carpeted throughout.'

Story 4

'This three generational household began with a long-term tenancy of this property 15 years ago. The (now) elderly parents have continued to live in the original home along with their youngest school-age son, their daughter and son-in-law with their young family. As the young family expanded to 6 children, the overcrowding of the 3-bedroom home became severe (11 people).

There are several reasons that the mother mentioned as to why families sharing the home was positive. The grandmother has heart problems and has occasional 'turns' and her daughter being present during the day gives the grandfather (75yrs) a feeling of security while he continues to work. Their son-in-law works permanent night shift and he also finds security in knowing that his wife and young children have support during the night hours. It is also often helpful with childcare to have grandparents close to leave the baby asleep while transporting children to kindergarten. The mutual assistance they offer each other was evident when I recently spoke with the grandmother by phone; she was assisting the children off to school because her daughter was sick. Financially the two families have managed to share costs of living and it is useful to have the mutual backup through difficult periods.

With the HHP intervention the house has been extended to 6 bedrooms, the lounge area made larger with an improved kitchen. The family moved out for 8 weeks while this took place and during that time the grandparents found the double storey temporary accommodation difficult to manage. The extension has made life much easier, reducing the stress of inadequate living space however the bedrooms continue to be cold during winter. The household is now more able to offer hospitality to family, friends and their church congregation.'

Story 5

'The interview was with an elderly woman who is a widow with 5 adult children and 5 grandchildren. She has lived in Otara for the last 20 years and all her children grew up there before moving on to other areas with their partners. Her late husband had limited education and his dream was that his family have a much more stable lifestyle than the one he had grown up with - constantly moving with his dad and living amongst a variety of family members. Her late husband always believed in hard work and lots of effort would help an individual succeed and achieve their dreams.

She likes where she stays because it's handy to church, friends and families. One thing she regrets is not learning to drive and this was particularly difficult during the period her husband suffered a stroke. She was dependent upon her children to take them to the hospital and doctor's visits but that had to be scheduled around the children's activities that day.

Rent is cheaper at this place because of Government initiatives. During her time in Otara she has felt the effects of benefit cuts (when the National Party was in government). However when Labour came back into government her rent decreased significantly and she is happy about that.

Since coming to New Zealand the tenants have maintained strong family connections with both their immediate and extended families here and in Samoa. This continues to this day with her children always supporting emotionally, socially and financially towards any family commitments. She's grateful for the extended and immediate family support as it's her main base for continued fellowship and socialising.'

Story 6

'This household was represented by a married father of a family with four children who have only just been in their new place for nine months. To get to this new house has been a dream come true after 14 years of waiting. The family reported a complicated history with HNZC, from high turnover of case managers to delays in maintenance work.

Since moving to their new place the family are much happier because the new place is heated, spacious and in a safer area. However there are still issues around who fixes things at their new property, due to the property being 'owned' by a private landholder and leased by HNZC.

With his wife working on-call for an electrical company they're managing to meet all financial commitments and enjoying seeing their health improve because of a structurally sound house. As he puts it, "I have waited a long time with patience with the hope that one day we'll get a home of our own.'"

Story 7

'This household interview took place with the married tenant with six children between the ages of 2-15 years old. She has lived in this house for more than 10 years, and her children have grown up in this house. At the moment she is doing a part time course at a tertiary institution which she hopes will lead to employment. Her husband works full time and her children are at school.

The HHP was involved with this household because the family living here required a bigger place. Therefore the HHP extended the house. Interviewee said she is so grateful for all the hard work that the HHP has done. She said since they added extra rooms and opened up the kitchen and lounge her family has more space to move around. Also her children do not get sick as often as they used to, as there is now more space and the house is not as damp as it once was.

From visiting this household, it was obvious that the interviewee took great pride in looking after this house. This is because everything was so nice and tidy. Interviewee said that her house used to be very untidy because everything was crammed in.

Interviewee said that when the house was small her family did not get along as well as they do now because there was little privacy. But since the HHP her children are much happier and more settled because they have their own rooms. The interviewee is a hard working person who takes care of her family very well. She has the responsibility of taking her husband and children to work, school and to the doctors because she is the only one in the household that can drive.

She said that she loves living in this neighbourhood because it is like a little family community where everyone on the street knows everyone else and they are willing to help you when you are in need.'

Story 8

'This HHP intervention involved a transfer for a mother who is a sole parent living with her seven children. The house had an existing sleep-out that required a permit and the garage space was converted to a play area that has since been adapted as a large master bedroom. The children range in age from 18 months to 19 years and the mother described the change for her as being 'awesome'. Her two eldest boys have a bedroom each in the sleep-out with a living area and bathroom/laundry attached. The other five children have adequate space in the house, particularly as they are now not all sharing a bathroom.

For the mother the effects of these changes have turned her life around. She is thoroughly enjoying a correspondence computer course that offers support locally and enjoys being able to host family and friends for visits as she wishes. The family have moved from a neighbourhood where crime was common and keeping her children safe and out of trouble had become a challenge for her. The elder boys have continued their high schooling at the same school with bus transport and the move to a local primary school has been a good transition for her 6 year old who is now confident to walk there. The fighting between children has reduced considerably since they moved to a larger home. The boys sometimes miss the company of their peers in the old locality but overall the family is much happier.'

Story 9

'A solo mother with six children between the ages of 4-19 years has been living in this house for 15 years. Interviewee's brother and mother also live with her.

The main reason the HHP got involved with this household was due to overcrowding. Interviewee said that she used to have many family members living in her house, and that because of the HHP her house is no longer crowded. She likes the fact that she doesn't have so many people living with her because she is now able to spend more time with her children and do the things that she enjoys without the problems caused from other relatives living with her.

Before the HHP interviewee said that she preferred not to stay home because the house was always in a mess due to the number of people living there. Now she loves cleaning her house and takes great pride in it. She is also no longer ashamed to have family and friends over as she feels her house is now more tidy and homely.

Interviewee said that when the house was overcrowded there were too many bad influences, such as drinking and smoking, which would lead her to follow suit. However, since the HHP, interviewee no long feels the need to drink or smoke. Interviewee and her children are now devoted to Christianity and love going to church all the time.

From this interview, it was easy to see that the interviewee was very happy with her new life, thanks to the transformation set about by the HHP.'

Story 10

'This household moved into their rental home three years ago after it had new insulation and ventilation fitted. Their HHP intervention has therefore been minimal. A married couple who were both born in Tonga, they live with their three children who attend the local primary school. The two preschoolers are not receiving preschool education at present; they are on a local waiting list.

The children's mother is socially very isolated in the present location, having strong links with extended family and her church in Mangere. She has not formed a social relationship in the present neighbourhood. Transport for visiting and social support is difficult as her husband works 7 day 12 hour shifts locally.

Mother talked of her wish to continue unpaid work in the home to maximise her children's welfare and the hope that they will eventually be able to shift to Mangere and own their own home.'

Story 11

'The household interview was undertaken with a young mother of 4 primary school aged children, who is expecting another child later in the year. In the last year she has picked up paid employment, a new experience for her because since having her first child 9 years ago she hasn't worked at all. She's found it challenging with no experience at all in the workforce. She works full-time at nights starting from 12am to 8am when she comes home and gets the children ready for school. Her partner also works full-time during the day so someone is always at home for the children.

Previous to involvement in the HHP, they had been living with her parents nearly all her life. At her parents' place there were up to 12 people there at any one time. The mother and her partner had tried living independently before by renting another property but couldn't keep up with bill payments so they moved back in with her parents. Currently, the couple struggle financially despite both working full-time. Food choice is limited to bare basics for children's lunches and needs so they limit themselves to finger food and noodles. Whatever is left over from the children's meals the parents finish off so that nothing goes to waste. Since moving into their place the tenant's relationship with partner is less stressful because they have their own space and freedom. They have more time for each other and privacy is not an issue anymore. Although paying rent is difficult they're managing with her job. She hopes to pay off some major bills before she finishes work to have her next baby.

They took the current house because it's across the road from her mum's place so there's always constant contact with them. Her mother has had a lot of communication with case managers and she still looks after any concerns for her daughter at their place. If anything needs fixing the tenant rings her mum who rings HNZC to come and look at the problem. The tenant's house structure is similar to her mum's place. It is very cold and damp; cracks in the living room floor where you can see mud and grass underneath the floorboards. They spend a lot of their time upstairs in the one bedroom because it has carpets and it is easier to heat with many bodies in one space.'

Story 12

'This household was represented by a married mother with four children between the ages of 10 - 21 years old. Three of her children live at home, while the oldest is living with his girlfriend. The family have been living at this house for about a year, after being transferred from their old residence because the house was too small for the size of the family.

They enjoy the fact that their new house has more room to move around. However, they wish that they could have stayed in the area where they use to live because it was close to work, schools and public transport. Interviewee said that now they are living at their new residence the cost of living has increased because the price of rent has gone up and interviewee now gets less hours at work, as it is further to travel. Before she was able to walk to work but now she has to go by car or use public transport, which is an increased cost for the family. From this interview it seems apparent that the HHP has been beneficial for this family in a sense that they have more space, however it has had a somewhat, negative effect on their financial situation.'

Story 13

'The tenant interviewed was a married woman with 7 children ranging from two years old right up to 19 years old. She suffers from diabetes and high blood pressure. Every day she takes between 9-12 tablets to help her cope with these illnesses. She gets tired easily and needs to rest often to help keep her strength up.

Her husband is the sole income earner for the family. Her oldest child works occasionally, covering those employees who call in sick or are on leave.

At their former place, there were only two bedrooms which housed this family of nine. They had lived in cramped conditions for a long time and every so often they would have visiting family members stay for a period of time. So overcrowding was a common occurrence.

Their former house was structurally "run-down", with a number of maintenance, heating and ventilation issues, and coldness and dampness. Family members' health was not improving because viruses would spread quickly between them all under these cramped living condition.

Since moving to their new place, they've had more space for storage, to move around and more privacy for adults and children. But financially it has been a struggle to meet all bills and repayments on one income. They've even had to go without groceries to meet rent obligations.

When I visited, the interviewee's mother had passed away a few weeks before and they were waiting to get their furniture back which had been repossessed.

The family's health status has improved to the extent that they're not getting sick so often, but until their immunity improves they're still be susceptible to the common flu and cold.'

Story 14

'The interview took place with a solo mother who is looking after her six children. The HHP transferred them from a three bedroom house to a five bedroom house, meaning that the family has more space to move around. The children love having lots of space outside to play their games and sports. In addition, the new home is still in the same area as their last residence. This means that the children are still able to attend the same schools. They also still live close to the shops and public transport.'

Story 15

'This household has benefited considerably from moving into a new home that has been leased by HNZC. The members comprise of a working partnership of two foster parents and three children who have lived with them since they were newborn. They were former longstanding tenants of a three-bedroom multilevel home that was inappropriate considering the gender/age mix of the occupants and the poor mobility and health issues of the mother.

Their new home has four bedrooms and two bathrooms, giving adequate space for each person, in particular a comfortable room with ensuite for mother who has numerous serious health problems and often requires assistance at night. Transport costs have increased to continue at the children's school, however the father feels that the change has been well worthwhile, giving him a hobby space in the walk-through garage and far greater ease of movement for the mother on new even surfaces. The association with HHP has led to enhanced social welfare support for the household as well as improved physical living aids for mother who is very unwell. All members of the household are happier, able to enjoy having visitors if they wish and all feeling a great sense of pride in their new surroundings.'

Story 16

'Visited with the mother of seven adult children. She is divorced, and stays at her new house with her youngest daughter who is training to be a primary school teacher. She is extremely happy with her new house because of the bigger rooms, kitchen and bathroom, as well as a new garage for the car which also doubles as a storage facility for miscellaneous stuff.

At her former home she stayed with her youngest daughter and another daughter who was married with 3 young daughters. This was a stressful relationship at times with conflict between the mother and daughter, as well as the daughter and her young family. The stress was the main reason that the tenant wanted to move on and find her own place with her youngest daughter. Since moving into their new house she has found it financially difficult because they have to survive solely on her benefit.

Her relationship with her younger daughter has become closer but she still worries about the welfare of her three granddaughters. The daughter who is the mother of the granddaughters starts work very early in the morning and there is no one to supervise them in the morning. The father is no longer part of the family unit, so the interviewee helps out by letting the granddaughters sleep at her new place and then takes them to school in the mornings. After school their mother picks them up, washes, feeds and spends time with them before taking them back to their grandmothers' place to sleep. If the tenant had known it was going to be like this she would have stayed in the old place rather than move into a new house.

One of her disappointments is that she feels her children don't appreciate enough the sacrifices she's had to endure in order to keep them fed, clothed and educated. She's always dreamed that her children will pursue higher education and one of her sons has, but she wants all her children to achieve well academically. It can only help them in the future. She herself was pursing a degree but had to put that on hold in order to look after her granddaughters.'

Story 17

'This household is made up of a married mother with four children. Her brother also lives with them. Two of her children are disabled and require constant care, so the mother is a full time caregiver at home. She is responsible for the health of her family and feels as though she is the only one that can take proper care of them (especially the disabled children).

The HHP has been very good for her and her family because the layout and size of the house is now suitable for the needs of the family, especially her disabled children. The disabled children are more independent because they have enough room to move around in their wheelchairs and are able to use the facilities (bathroom) much more easily, due to better access.

The HHP has made life much easier for the interviewee as it has reduced the amount of house work required, and provided more space around the house, thus she now has more time to focus on her own health and wellbeing.'

Story 18

NB: Household where HHP was unable to find an acceptable solution for family.

'Interview carried out with the married mother of five children. She stays at home looking after her husband who suffers from diabetes and high blood pressure. One of her sons had rheumatic fever and has only just stopped getting his monthly booster shots from the doctors. His immunity is very weak and he is susceptible to cold and flu viruses very easily. When he is sick it can take two to three weeks for him to recover fully. While he's sick he's not paid from work.

Although they were shown a bigger and better house they couldn't take it because the rent was too high. HNZC suggested they get another family to move in with them and help offset costs. That would have led to more overcrowding, something the tenants were wanting resolved at the new house.

They have had to make their own improvements to the current house. This has involved repainting the kitchen and bathroom walls, buying mats and rugs to help keep the place warm - all of which have come out of their own funds. The household has experienced some mixed messages from HNZC staff about possible modifications to their home, and feel frustrated at their experience with the programme thus far. This couple feel stressed and angry toward HNZC and its treatment of them and their family. They have had negative experiences with a 'case manager'.

Their family's health is not improving and it depresses the tenants thinking about how much longer they have to endure living under these severe health conditions. They would really love to know that people do care about them and their situation.'

Story 19

'Before moving into this house, the resident interviewed said that she was a home-owner. Due to personal circumstances she had to sell her house and apply for a HNZC property. The reason she got involved with the HHP was her mother was very ill and needed somewhere urgently to stay. Since the mother passed away, she only lives with her two sons.

Her oldest son is blind and also suffers from diabetes. His blindness started a year after they moved into this house. Minimal changes have been made to the layout of their household because her blind son knows his way around independently.

Interviewee enjoys the fact that she and her two sons have their own space. She also likes the fact that she is not very far from public transport facilities and her church. She said that she is a busy woman who enjoys visiting her friends that live down the road from her.'

Story 20

'The interview was held with mother taking care of her two children, who are 2 and 8 years of age. She has lived at this residence for one year.

The reason why she moved from her parents' house into her own place was because the HHP advised the parents that their daughter needed her own space, as their house was becoming overcrowded.

Interviewee said that she enjoyed living with her parents and other family members because she had always grown up having a lot of family members living in the household. Interviewee had a close connection with her parent's house as she had grown up in the house.

Interviewee said that since moving from her parents' house, it still feels the same as if she was living with them. This is because she has family over every single day, which she thoroughly enjoys.

From this interview it seems apparent that the interviewee is a very family orientated person who takes great care of her children and house.'

An extract from one tenant's story, highlighting the magnitude of difficulties experienced by some of the families:

"This caregiver's pension I'm on - after the car goes out, insurance goes out, some weeks I'm left with $25 and some weeks it's $50. My big boy needs a school jumper; he was playing rugby and ripped it. I've got to find one second hand one - they're $86 new. My little fella, he goes through shoes like they were made out of paper, the way he drags his feet. It's just trying to find the money, I do my best. Because C's money goes, I don't get enough money for the house, I keep the car on the road; I keep the insurance paid, burglar alarm. She just pays the sofa off what she bought, some for the power, now we got no telephone because we couldn't keep it up. It's supposed to be put back on again, Social Welfare is supposed to be helping, because she has got to have the phone you see and then she gives me so much for shopping and she only gets $200 and something and we really tighten the old belts and we get through one week at a time. If I find extra money selling something it always goes into the house or fruit and veges for her because she has got to have a lot of fruit and veges. But we just get along, but I hate money, it's the root of all evil [laughter]. But if I've got the money it goes into this house. My stuff I need for my hobbies to sell, that's last – I've got to make sure the kids have got their shoes and we got food on the table for the kids and we've got power.

I think the costs have gone up with heaters for her and the bath, electricity has gone up. I am on a caregiver's benefit and an emergency benefit, without the extra everything would be repossessed. That's due to be filled out every 3 months, my daughter helps me fill out the stupid forms and then we have to go in there and argue with them."

4 HOUSEHOLDERS' PERSPECTIVES

"Once I join this programme everything change. I feel proud of my house… I invite friends and family over and we have cups of tea or we lunch. I'm not shame like before."

4.1 Overview

Twenty households were interviewed to collect stories of success and obstacles to success as a result of their involvement in the HHP. Some households were visited more than once to gather the full narrative of their experience. This chapter presents the outcomes of the HHP from a householder's perspective, with excerpts from the interviews. These are presented verbatim where possible, largely to maintain the true sentiment of interviewee comments.

The majority of households that were interviewed for this evaluation concluded that their experience with the HHP had been a positive and beneficial one for their health and wellbeing. Tenants overall comments reflected satisfaction with the changes made, and experiences of favourable outcomes.

The most common outcomes identified included: increased empowerment; a reduction in illnesses such as asthma; improved comfort of their home; and, a general sense of social wellbeing and functioning within the household. The latter outcome of enhanced social wellbeing was expressed in many different ways, and often as an indirect (and perhaps unexpected) effect of interventions. Certainly, the strongest connection made between the HHP and tenants' health referred to psychological wellbeing (stress, happiness, connection to family) of the household unit.

4.2 Outcomes from householders' perspective

The HHP has adopted a dual intervention approach to promote the health and wellbeing of tenants. In household interviews, the tenants' perceptions of outcomes often revolved around the tangible changes made to their household, such as additional bedrooms, bathrooms, and structural modifications. Those who were in households where extensive changes had been made were able to convey a greater number of effects than those who only received minimal housing intervention. Those with the minimum insulation/ventilation intervention often noticed an improvement in the 'comfort' of their home, which had several effects on the household from simple enjoyment of the home to an observed reduction in housing-related illness (particularly asthma and respiratory infections). Tenants for whom the HHP delivered greater structural change (modification, extension or transfer) gave more noticeably detailed stories about how the

changes in space, communal service areas and specific modifications had created a more suitable living environment for their household composition.

> *"It used to be a 3-bedroom house and they turned it into a 6-bedroom house with an extra bathroom and toilet. I was here before I was married, we've been here for at least 15 years; I grew up here. Mum and Dad wanted to move out but because there were so many children they [HHP] decided to make it bigger as there were so many adults and children together in the same house. That was good and they made the lounge and the kitchen bigger as well."*

4.2.1 Empowerment

Several excerpts from this group of household interviews indicate that tenants value the effort made to involve them in decision-making around the housing interventions, from relocation options to renovation changes. This inclusion appears to foster a feeling of ownership and pride in many tenants.

> *"It is a very good, friendly neighbourhood. This house is in a no exit [cul de sac] like the last house in Manukau. They [HHP] said 'We have found a similar house, at the end of the street'. They called us to come and have a look; it's good at the end of the street. We came to see the house."*

> *"This place it is well fenced off, I'm so lucky to get this place. When Housing came over and dropped the paper about looking at this house, to see if we wanted this house I couldn't believe it. It can't be! So I asked my neighbour if this was the number I was looking for and he said 'Yes it is!' I said 'It can't be!' Wow! The house that I was living in was awful…"*

> *"We came here with the Housing people to talk about how we wanted this house - if we wanted the open plan and we wanted that."*

> *"I like this place. Housing Corp has leased these 3 houses for the next 10 years; this was new when we came in [9 months ago]. I appreciate what they done to finally get us out of that house, because if we just applied for another house we'd have been sitting in that house over there for another 2 or 3 years. But it was no good for C or the kids, the lack of rooms and only one bathroom with everyone queuing, banging on the door… But this is good, I'm very appreciative of Healthy Housing and all the 'sisters' [nurses] for what they done to get in and fight for us to get this for C and everything. Everyone is happier, my daughter's got her own room now, 2 boys have got their own room, C has her own room, I got my own room. There's 4 bedrooms, 2 toilets, 2 showers, one bath…."*

> *"HH bought this house for me to rent and made changes. They had to have a permit to convert the garage to a rumpus."*

> *"They had to get a permit first because there was no permit on the sleep-out and because they knew that I had grown teenagers and that they knew that we can't all share the toilet and bathroom they helped by building another shower for the boys out there."*

4.2.2 Improvement in comfort and wellbeing associated with household temperature/dampness/ventilation

There was wide variation about whether the tenants experienced a positive change in household warmth. For most households where issues of insulation, ventilation, heating and/or household comfort were addressed, tenants noticed an improvement in the living environment. However, for other tenants, their needs were not met – often for reasons of heating and/or insulation still not being adequate, or because of the cost of running heaters. Several observed improvements in how dry the house was, and assigned great value to having carpet when part of the intervention.

> *"Health of household (especially disabled children) wasn't too good [before HHP], as her daughter suffered from pneumonia. One of the reasons why her daughter suffered from pneumonia was due to the [old] house being very damp and cold."*

> *"Interviewee said that before her house was very cold and damp. However, while being in the HHP they have changed the carpet and vinyl and put Pink Batts [insulation] and air vents on the windows."*

> *"It's a good dry house, the bathroom and everything. It's quite cold here and in the sleep-out, but we are lucky we have a gas heater."*

> *"More settled, no worrying about what else to fix, it's nice to sleep knowing you're warm and you don't have to worry about the cold."*

Several tenants lived in mouldy homes previously and none have reported mould in their home since the intervention. The difference is notable for many and some connect this with improved health outcomes.

> *"Old house had mould in all the rooms. No mould here."*

> This same household experienced some spartan winters previously:

> *"It was so cold and damp. We didn't have money for extra power so we often sat around the TV with blankets, couldn't put heaters on. It was no good, I hate electric fan eaters 'cause I get headaches, like me I always have the window open even at night in the winter, I teach the kids to always have them open a bit."*

Sometimes opinion on comfort differed within the same household. The age and health of household members and location within the home affected the experience of a range of comfort levels:

> *"It's not a warm house. We never put the heater on. Especially the old rooms are cold. Night is worse in the corridor, very cold- hot in the summer."*

> Father*: "It's very difficult for her because of her sickness. I think it is a warm house but it's hard for my wife with the sickness. When it's cold (the pain in) her hands are worse..."*

They reduce her discomfort by localised heating that reduces her pain levels:

> *"The new house is light and warmer but not really warm so I have to use the heater in my room for a little while before I go to bed."*

Although wall heaters had been installed in homes there was often a reluctance to use them due to the cost of electricity:

> *"My father says it's warm but it's cold and he won't use the heater."*

For some the changes in health were profound:

> *"An extra room with insulation (floor and walls) has been added on to the house (for disabled daughter) as she suffers from pneumonia. Also the extra room is wider and bigger than room the daughter used to be in."*
>
> *"Because of the HHP her son does not suffer from eczema or asthma. Also interviewee's daughters do not suffer from asthma anymore."*

The health of this family including several asthmatics, improved markedly after moving into a new home:

> *"The house is warm as it's fully carpeted because now C has asthma too and daughter with asthma. It's warm. There are Pink Batts [insulation] everywhere – it's better. The old house had mould in the bathroom and it was damp. The windows got mouldy and they put ventilation strips on the windows. It's already been done here. It's good, we're very happy now we've all got our rooms and it's carpeted, being a new house."*

In the same household, a strong connection was made between the improved living environment and a vulnerable tenant's health:

> *"It's warmer, carpet, thick curtains all the way around, it's warm her asthma is better, we used to have to take her to hospital sometimes in the old house as she couldn't breathe."*
>
> *"We have more clean air to breathe, and we don't become sick so often because we're not sharing the same room with sick family members. It's warmer in the house and everyone likes that."*

4.2.3 Housekeeping

An improvement in housekeeping (or a reduction in the need to clean) was observed by many households. Three reasons prevailed in causing this pattern. Firstly, an increase in space was a reduction in the amount of 'mess' made in communal areas. Secondly, surfaces and materials used in modifications or extensions were easier to clean. Finally, a

newfound pride in a new or renovated house often led to increased attention to cleanliness and order.

Several types of changes that stemmed from the HHP involved there simply being less mess to contend with in the household:

> *"Before the HHP the living room was always in a mess because the children would bring their toys and drawings into this area, due to their rooms not being spacious. But now since the children have their own space, the living room only has to be cleaned twice a week."*

> *"Normally before, lots of old things (boxes and suitcases) around the house, but now I throw all the old rags in the boxes and suit cases away. I can see there is much more space now, it looks nice."*

Newly installed surfaces made a difference:

> *"It's easier for me to clean, before it was wallpaper. When I came second time to see they put the white board. The kitchen cupboards are easier to wipe, not painted but the shiny board is easier to wipe. Its easier, the bathroom, the toilet."*

An increase in house pride was noted due to the improvement in tidiness of the home. Eliminating some of the previous obstacles to hosting friends and family was often attributed to an improved ability to keep the home tidy:

> *"When your family comes over you don't feel like welcoming them because of the house being very untidy." Since the HHP, she said that she enjoys having family and friends over because her house is tidy.*

It was noted that children in the households with additional bedrooms sometimes paid more attention to housekeeping since gaining their own space:

> *"The old ones enjoy having their own room. They keep their room tidy."*

> *"She now gets her children to make their beds and do house chores before they go to school.*

Modifications often had multiple flow-on effects. As a result of improved relationships and 'own' space in the home, one householder had established more organised housekeeping practices:

> *"Before there was tension between the children, space was a problem – 'No, you made that mess'; 'You dirtied that plate you wash it.' But now, since we moved here, everyone has a week about - washing, drying, making the tea. Every week it changes. The 11 year old makes the tea and toast for her. One does the dishes, one dries and the other the tea. I bring these kids up to show respect, open the door, to offer a cup of tea to visitors."*

After living in a mouldy, cold and dark house, one tenant commented that a warm, light house was easier to clean:

> *"A lot warmer - house has carpet and drapes, more light gets in, and easier to clean."*

Housekeeping was also mentioned as a consequence of an increase in visitors when residing in the preferred venue:

> *"Family come more often; it's good but the bigger the house the bigger the mess."*

4.2.4 Food preparation and choice improved for some households

It was not common for tenants to discuss changes to food choice since the HHP. The main reason for this appeared to be a restricted food choice based on a low income, an enduring issue which had not changed significantly since the HHP.

A larger or more suitable kitchen can lead to more cooperative food preparation activities, particularly allowing children to help out:

> *"Vent above stove… Easier to cook in this kitchen. Large quantities with teens. Sometimes the big ones make their own if they don't like our dinner."*

> *"Preparation is easier with the kitchen bigger, the old kitchen was really small without much bench space. The space is easier and the kids can come in and help and the pantry is nice and big… Plenty of cupboard space and they added ventilation strips."*

While uncommon, some households touched on an improved ability to make healthy food choices after involvement in the HHP:

> *"Can afford to buy more healthy food - veges and fruit for the kids."*

> *"Normally before we used- to eat meat, but now we just only eat fish and chicken, we are getting rid of meat."*

4.2.5 Improved accident and injury prevention

While some discussion was had around the HHP resulting in improvements to safety (particularly child safety) and preventing injury, most comments for this theme were around the lasting concerns around wet outdoor areas and risk of falls. These are presented in the 'Obstacles' section 6.3. Of the successful outcomes around safety, topics included:

A safer play area led to less tensions for the caregiver:

> *"More space for young children, big help having place well fenced and they can be seen from the inside rooms."*

"[Change in safety?] Yes - with the driveway. I know the kids are safe, and no one else can drive up and down it."

"In the kitchen before the bench was quite pointy and it was really narrow and the kids run and always hit their head on the corner of the bench. But now they have taken it away."

A formerly crowded household that included members who did not look out for the safety needs of children was an added burden:

"Normally before you know my children, because everything was all around, there's too much people over here staying with me. They leave knives around my children; can just grab it and play with it. Sometimes they cut themselves."

A smaller household has led to a new sense of control for this interviewee:

"That's why I love my life now, it's much more easier for me now, not like before, I had a hard time with my kids, always see Doctor."

Injury prevention was provided for those charged with caring for a tenant with a disability; thus 'taking care of the caregiver':

"Before HHP she had to lift her daughter from the bed to the wheelchair, wheelchair to the bed, because she couldn't use the hoist due to there not being enough space in daughter's room to use it. Interviewee said that sometimes she would experience back pains, due to lifting her daughter. Since the extra room has been added on for her daughter there is more space to move around."

4.2.6 Contact with healthcare providers

A small number of passing comments were made about 'seeing the Doctor less', and a reduction in episodes of asthma or eczema. Household interviews did not uncover frequent references to changes in healthcare providers.

"She sees the GP less often because kids don't get sick very often."

The involvement of the PHNs pre-empted a host of ongoing health assistance for one tenant and his invalid partner, and the restructuring of social welfare arrangements that have benefited the household income. This includes help with car repayments.

"I'm very happy in this house I love it, if it wasn't for Healthy Housing and the 'sisters' (nurses) we wouldn't be here and I just imagine what (my partner) would have went through."

"No specific health issues [before HHP], just too little room. The kids were getting a lot of sickness. The thing I didn't like was sharing a bathroom and toilet - there was a lot of us. Since we have been here it's been a lot better. We've had a few flu's and that but it's been a lot better everyone having a room."

"She sees the GP less often because kids don't get sick very often.

"The health of the household has not really changed, the house is still cold, the size is good."

Sometimes it was preferable to travel back to the old family doctor:

"When I changed doctors when I move here I transferred back to my Dr in East Tamaki that I was brought up with. If children got sick on the weekend there was no one there (at the nearby medical centre) and I had to drive long distances. Plunket still come here; that suits me. No changes in contact with other health nurses or anything."

The HHP was developed partly in response to the increased risk of meningococcal disease in crowded households (Baker et al., 2000). Particular emphasis was placed on the number of tenants per bedroom, and the HHP incorporates an extension element into the intervention. For those households interviewed who had experienced an increase in space (through extension, relocation or transfer), the stories revealed a psychosocial impact of the increase. The biomedical explanation behind the intervention of decreasing the risk of meningococcal is not subject to the day-to-day experience.

4.2.7 Functional day-to-day improvement with increase in space

Almost all of the households interviewed commented on the improvement in how they function on a day-to-day basis since involvement with the HHP. This was usually attributed to the increase in space and bedrooms, along with service areas such as kitchen and bathrooms. Effects observed by tenants included improved relationships between all family members, increased privacy, parents able to have a bedroom to themselves, and a generally 'happier' household.

"She said that her family was very happy to move to the house that they are now in, because at the house they use to live in there were only three bedrooms. Interviewee said she is very happy that they changed houses because she now has five bedrooms, two toilets and two bathrooms. She said there is more room to move around."

"They added on 2 bedrooms and a shower and toilet to make it 5 bedroom. They took walls out to make the sitting room/dining area open plan. They moved the kitchen back and put a new kitchen in. It's big and the lounge and dining areas are bigger."

"The kitchen is bigger; having two showers and two toilets is asset, especially with teenage children."

"… It was like we were packed in to a sardine can, especially the kitchen, it was quite small."

'You now have separate spaces which you can identify as kitchen, sitting room area, passageway, bedrooms… There's more natural light coming inside the house through the different windows.'

Structural changes were undertaken that directly related to tenants' need (disability, chronic care). In cases where a household member is living with disability or chronic illness, the HHP has worked to alleviate the stress and difficulties faced by both the tenants and their caregivers. An enhanced ability to cope both physically and mentally was mentioned, an important outcome considering complete resolution of the health problem is not likely.

> *"She [nurse or OT] came after [moved in]; she was looking at how he stays in his room and how he walks, the room for him to walk around (with a walker). She was looking at his bed, it is really low and looking at how he stay in the room and how he can get to the toilet - she helped with the bed that was really low for him to get up, and my other kids, my son was in his room. They give him another mattress to put on to make it higher and a higher seat for the toilet and help with his shower, a seat for him to sit down in the shower."*

Two households in particular demonstrated the extensive effects that specific structural modifications can have on the health and wellbeing of a household. In the first case, the intervention made functioning day-to-day easier on both children and their mother (caregiver), increased their independence, and improved their access to bathroom and kitchen amenities.

> *"She said that there was a lot of work to do in the house. For example, she would have to do everything for her disabled children, such as get them a drink from the kitchen, because they didn't have proper access to such facilities, due to the size and space."*

Children with special needs were encouraged to become more independent:

> *"The children now have more space to move around in their wheelchairs. For example, the kitchen has been expanded in order to allow easier access for the children. They are now able to go into the kitchen and get their own drinks or snacks from the refrigerator… the children do not get so bored anymore because there is more space in the house to move around."*

> *"Built on an extra bathroom (with toilet) that catered for the special needs of the children. Before the additional bathroom was added on, the mother said that when she took her daughter to the toilet, other people would have to wait a very long time before they could use it, due to her daughter's disabilities. So now that they have this extra bathroom, no one has to wait to use these facilities."*

> *"She said that life is less stressful, as her children now have a greater independence. This has enabled her to have more time to herself - feels more relaxed."*

One household where a tenant living with disability had experienced very problematic mobility and coping, was more able to manage the condition since the HHP involvement, both on a personal and practical level:

> *"It was hard on C as she had to crawl on her hands and knees and everything because the girl had her room, sometimes the boys had their room and I had another room and C used to sleep in the lounge and she used to crawl all the way around the hallway to go to the toilet and crawl back because of her legs. Many times she slept in the bathroom and everything…"*

New houses affected health management:

> *"… so the nurses come and seen me as they'd just done a survey in the area to see if people were overcrowded or had sick people and everything. And then the nurses come and set her up with a frame around the toilet, a seat for the shower and that sort of stuff."*

> *"She got a walker now but when she was over there [old house] she had a walker for the last month or so we were there. Now she can get along, it's got a seat on it but it was hard for her to get up and down stairs. We had 7 stairs to go up and down to the [old] house. But over here its different, she's got bedroom right next to the toilet with her own shower."*

In the same household, further discussion revealed that the HHP made it easier to cope with the management involved for the rest of the family, despite deterioration in the condition of the woman:

> *"… But lately she has been going down hill. Sometimes the kids sleep in her room they sleep on a mattress on the floor if she's bad, if she coughs so much she loses her breathe. Her son rubs her and massages her, he's a good boy (17 years), he growls her - she wants salt on her fish, he says "No!" He checks her - takes a blood test in the morning and at night and the girl, she's in there too growling no sugar in her tea. If I'm shopping there's always somebody here. It's hard during the week if I want to go anywhere, there's nobody here but I know she generally falls asleep in the afternoon 2 o'clock so I lockup and take off to get the kids from school and she's still asleep when I get back."*

> *"This garage is good; it's easier because we can park the car and just walk straight out of that door to the car, no steps to take her to the doctors or the hospital."*

Modifications made for a resident with special needs can work to assist day-to-day functioning of other tenants too:

> *"She and her sons are happy about changes that have been made, such as a walk in shower. This was actually put in for her mother but now her [disabled] son benefits from it because it is easy to access."*

4.2.8 Social wellbeing of the households

Strongly connected to the functional improvement of more living space is the benefit to social wellbeing. The HHP purports to find solutions that are appropriate for the tenants, such as extending a house for a family that is larger than the traditional nuclear family. During interviews, many tenants acknowledged that they were able to keep their extended family unit together, and the HHP added extra bedrooms and service areas to accommodate the numbers living in the house. Such a strategy shows that the HHP is aware of the meaning of family to Māori and Pacific people, where several generations often reside in one household. This in turn contributes to maintaining cultural identity and connectedness – important pillars for the social and spiritual wellbeing of Māori and

Pacific people. The provision of an enlarged communal space has improved household perception of wellbeing for all who received this type of intervention.

These improvements have had the effect of noise reduction through the separation of socialising from the bedroom areas with flow on effects, increased space has allowed for positive interaction among family members during meals and recreation times and an increased willingness/ability to offer hospitality to extended family and community groups.

A reduced work load for the parent of disabled children was the result of spatial changes that led to more independence for her children. As well as accessing the kitchen for drinks and snacks, *'they can brush their teeth and wash their hands on their own, as before the sink was too high in the other bathroom'.* The parent is less stressed, has more time to herself and feels more relaxed. Thus a strategy that improves the physical space for the child can have flow on effect of vital support for the parent/caregiver. Similarly for some, having adequate personal space generated a sense of pride that reduces work for parents and engenders habits for daily living.

In this household a change occurred so that before they go to school the children make their beds and do chores, as opposed to *"before get up and go, no brushing teeth, now brush teeth, wash face and make lunch and go."* The task of managing the household is therefore easier.

> *"Since the kids have their own space, they are now more settled, they got somewhere to hide their own things."*
>
> *"We were excited when we heard that they would get a bigger house for us because it has been so long asking for a bigger house. I am very happy about that because my kids have their own room, you know and they have a space for them to do their own ….and homework".*
>
> *"Before they [went] to the neighbours to play. They had no time to stay and study at home because too much people at home."*
>
> *"People are more happy, now and then the grandparents find it hard if the kids make too much noise now and then but not as extreme - now it's big and more spread out and people have more room it definitely more relaxed. The space did make a difference for the family."*
>
> *"Family gets along better here. When we went out somewhere and came home, we would all line up, needing to go to the toilet, shouting, some would jump out the window [to go to the toilet]. Same on Sundays getting ready for church, everyone needs the bathroom."*
>
> *"Before all the 5 kids were in one room. Now the girls [3 of them] share one room and the boys [3 of them] have the other room. My brother lives here as well. It did make it better coming back to a bigger house it makes life easier."*
>
> *"It really did reduce [the fighting] once we moved here, its awesome. I used to get really tired of it before. Sometimes I had to just close the door; I was just so happy that we got transferred."*

An increase in space was said to encourage members of the household/family to spend time together, and having fewer people in the household was of benefit to the parent-child relationship at times:

"We get on well now I spend more time because less people living here."

"The children are more open to me now because it is only us here. They tell me if they don't like something, not like before when our house was overcrowded."

"Very happy - everyone has plenty of room. The old ones enjoy having their own room. They keep their rooms tidy."

"We eat together [with parents] most of the time but sometimes Dad likes to eat later on when it's quieter. It's good because they live down the back [in the house] and they have their own bathroom and toilet and we live in the front and we use this toilet. Those two usually sit at the back and watch their own TV in the room… Dad sits outside and smokes and has his beer and then he will come and eat; he still works, he's 74 and so when he comes home he relaxes outside and then he comes in and has his shower and dinner otherwise it works out well."

"I know I can spend much more time with my children now. We get on well now. Spend more time because less people living here."

A living situation with extended family can be viewed in many ways, best represented by this example:

"My husband gets bit hoha sometimes about living with the parents but I said we did talk about it before we made the decision, this is like a permanent thing. He says that there is always someone here with me at night time while he is working and so he looks at it that way and sometimes does extra with no days off or nothing."

In one household, a transfer resulting from the HHP allowed an adult daughter to achieve more psychosocial autonomy:

"Great change because me and my youngest daughter are in our own house without any interference from other people or their children. There's been a change in stress levels now that we have more freedom, and out of Mum's 'protective' reach."

"Daughter and mother's relationship has become closer because there's just the two of them now, they're happier and feel freer because it's not cramped anymore and there are no children constantly under their feet or in their faces demanding their time, attention and patience."

Likewise, a transfer alleviated stress for a tenant who had previously accommodated family members:

"Because there was my two daughters, three granddaughters, one son-in-law and myself, it was at times noisy and this made it difficult to have quality time to myself or with my children. We were at times very irritable towards each other, and my daughter didn't like me or my youngest daughter correcting her children when they misbehaved. It was very tense sometimes."

The reduction in crowding of a household was often linked to an improvement in household wellbeing. Reducing the number of people living in the household was recognised as important for reducing the risk of illness:

> *"She said that the health of the household was not very good [before HHP] because the house was overcrowded with other family members and that her children got sick very often."*

> *"She said that they were not too happy because there was too much family living with them. She said that because her house was overcrowded it was always dirty and she did not feel very comfortable."*

> *"[Improvement] because of the space. Having own driveway has eliminated hassles we had at the last place with a shared driveway. Safer for the children. Peaceful and quiet."*

The 'rules' of HHP were cited as enabling tenants to maintain an uncrowded home in the face of family pressure:

> *"She said that at one stage her niece and two kids wanted to stay with her but because they are in the HHP this was not allowed. Therefore interviewee's sons are quite happy that their house is not overcrowded."*

4.2.8.1 Reduction in stress from noise

Noise is a stressor that can lead to tensions in a household, preventing sick members from rest or shift workers from sleeping. An increased communal living space supplies a legitimate space for noisy activity and offers choices for people to work around the issue. Routines around meals are able to develop. Although the communal areas in themselves can be noisy places, the provision of adequate social space has affected a noise reduction in other household areas of personal space, such as bedrooms, that is particularly appreciated when elders share the household with their grandchildren.

For one three-generational household, the increased use of adequate living space for play or relaxation has meant that the added wing for grandparents is a quieter 'haven' from busy times when a large young family gets ready for school and pre school or the evening meal. They can separate themselves from it.

> *"… the grandparents find it hard if the kids make too much noise now and then but not as extreme [as it was]. But now its big and more spread out and people have more room, it's definitely more relaxed. Before we would just [go] out to find a space, have some fresh air, give the kids a chance to move around, take the pressure off my parents, there have been times when they [would] nearly go mental."*

For another large household the increased living area, and mother (with chronic ill health) having a room *'out the back'*, means that she can rest when she is not well and her teens can have fun with friends in the living area:

"I can't hear if they are playing music in the living area or loud laughing. They say [next morning] 'Did you hear us Mum, last night laughing hard?' I say 'No, I never hear anything.' Life is easier here."

A mother of six is able to occupy the toddlers in the large living area during the day, while her husband, on permanent night shift:

"… sleeps well during the day now our room is off to the side I shut the [lounge] door. It's okay, he gets more sleep than me! [If he doesn't get enough sleep] I worry about him having an accident driving."

The deck has become an *'after work'* retreat for one grandfather who *'sits outside and has his beer and then he will come and eat'*, often after the small children have finished their meal. In the same household, the deck also offers extra covered play space for preschoolers when their cousin stays after kindergarten.

One tenant had to remove a freestanding den/workspace that he had previously constructed when he left his former rental property but is very pleased to have adapted a walk-through garage as his new 'dog-box' where he is able to smoke and do his hobbies and even socialise with his mates.

4.2.8.2 Improved sibling relationships/reduction in sibling rivalry

For any household, a more peaceful environment, contributes to an overall sense of wellbeing. Sibling rivalry was a persistent topic when discussing changes since the HHP intervention. One household did not notice any change as *'the household gets along well, just the same'*.

All others who increased their space reported reduced household tension since the children get along better.

"It was me, the twins and my son in one bedroom and the other bedroom was my 2 younger sons sharing and my oldest boy (because he turned 18) in another room. Sometimes (often) my other son would have to sleep in the living room because they fought a lot. It really did reduce (the fighting) once we moved here, it's awesome. I used to get really tired of it before. Sometimes I had to just close the door; I was so happy that we got transferred."

"We were excited when we heard that they would get a bigger house for us because it has been so long asking for a bigger house. I am very happy about that because my kids have their own room, you know and they have a space for them to do their own... and homework. Some of them are happier and some of them not. Because they are growing, the other two start to annoy the older one and they don't have privacy from the other one. They tell the other one to get out. They like to have some private time."

"Better for the children. More room; they've all got their own rooms. Not sharing with older siblings. Mum and Dad have room for themselves - stopped the arguments between the older and younger siblings."

"The kids get along better since the changes; they're not fighting as much as before. The boys like having their own room the way they want and the girls like it too. They get to do whatever they want in there and keep the boys out."

"Before the children don't have any where to go to really, only have to stay in one room and do their study. But now since they have their own space (room) they can study better and if they rub each other up the wrong way they can run off to their own rooms."

"Sometimes I growl them, fighting over the TV because the soap opera and sports are on but the little one he listens to the radio and starts rappin' (laughter). Now they have their own rooms, it's easy for them - no 'get out of the room it's my turn to get dressed' and all that stuff."

4.2.8.3 Increase in privacy

Many household interviews revealed the importance that households place on having their private space, and for parents to be able to hold conversations away from children. Privacy is commonly linked to social wellbeing and household function in these comments:

"We got along okay, but we had little privacy and space to ourselves; if one person was angry everyone knows about it; if someone was happy everyone knows about it. We [were] always in everyone's business, nothing was a secret. That can be very stressful when you want to discuss something in private with husband or older family members. The children couldn't study properly because there was no space."

"We get along but there was short nerves back then because there was no privacy."

"Before the HHP no one had any privacy, but since they all have their own space now everyone is very happy."

"Had no choice but to cope with what we had. Fighting lack of own space and privacy."

'The Dog-box': *"I can sit out here and have a smoke, I call it 'my dog-box', 'cos C don't smoke any more. I do all my work out here, I used to do jewellery but nobody wants to buy it although the nurses bought some."*

"He [elderly grandfather] is happy he has his own room by himself in there, quiet. Not like before, share and the little one would be singing or music. It's good now and he has his own bathroom [with the high toilet seat]."

Privacy is still an issue in some households, however:

"Some of them are happier and some of them not. Because they are growing, the other two start to annoy the older one and they don't have privacy from the other one. They tell the other one to get out. They like to have some private time."

4.2.8.4 Changes in health maintenance behaviour/lifestyle changes

Changes to the home can have unexpected effects on health promoting behaviours such as exercise:

> *"She said that since they added a storage room onto the house she is able to have a treadmill, whereby she is able keep fit while she is at home looking after her children. She feels less stress because there is more space in the house. Before the house was very cluttered."*

> *"… Before usually go out (when we had a small house) just to take the kids to the park, but now we have big space inside and outside that they can run around. They also have a deck to play on."*

The influence of others in the home can also affect tenants' behaviour, such as in this example where changes in crowding also had a prevention outcome regarding smoking and alcohol use:

> *"When her house was overcrowded she would drink alcohol and smoke because of the influence of other relatives living with her. But now she does not drink or smoke since the HHP. "… I love my life to be like this, I'm a Christian, we are Christian… I don't want drinking or smoking at my place."*

4.2.8.5 Increased participation in educational activities (adults and children)

A less stressful home life and space to do homework and study can have effects on potential educational outcomes for both adults and children.

Across the households, there was a variety of responses about the effect of changes on school and homework engagement – this variation even applied within households.

> *"They have their desk in there or they do it on the table. Some have improved some stayed the same."*

One home had acquired a study room, where they have a desk and computer that had improved relations during homework. Two mothers had begun courses for job training since the intervention.

Children became more engaged in school/homework due to more space:

> *"Before the children don't have any where to go to really, only have to stay in one room and do their study. But now since they have their own space (room) they can study better and if they rub each other up the wrong way they can run off to their own rooms."*

In response to an interviewer's question, 'Are they doing alright at school?', a mother said:

> *"It's awesome, I can't believe the change. I think because maybe they have got nowhere to go here. My third eldest is doing more homework because he was doing less there, he was always being distracted. He is doing his homework here. About two weeks after the move the boys said 'Mum it's so boring here!' I said 'No it's awesome, just enjoy it because I love it!'"*

Adult tenants also experienced improved opportunities for furthering education:

> *"I get a lot of space; I get a lot to myself so I can do my studies. Sometimes it does get a bit noisy out here but if the boys are home I can ask 'Can you stay out in the sleep-out while I do my studies, take a little one and some chippies - just like an hour to study.' I love my course; don't know what I would have done without it."*

4.2.8.6 Social interaction

While a spacious communal living area facilitated social interaction taking place, it was also evident that the relief of overcrowding improved the quality of relationships within the household so that members were more likely to wish to spend time together. Increased living and sleeping space offered members the choice to spend time together, instead of an imposed togetherness.

In this household the grandparents are able to move in and out of this space, they no longer have to tolerate a host of small grandchildren all the time:

> *"Those two usually sit at the back in their own rooms. Mum [grandmother] does her handcrafts. [She] comes and sits here too [communal space] but Dad [grandfather] doesn't sit and watch TV with us."*

And so we get a picture of a dynamic, large household that is moving much of the time to accommodate their own needs, while at the same time being mindful of others' needs in order to live effectively together and minimise conflict.

One family includes a range of ages from young adults down to toddlers, and is very pleased to have a second communal space associated with the teen bedrooms in a sleep-out allowing for their very different 'play' activities. Mother moves the TV between spaces at her discretion and discusses this at monthly family meetings. The big brothers also entertain the little ones out in this area at times to give their mother a break from sole childcare for short periods. At other times the outside communal lounge is a place for the elder boys to entertain friends, and outside the door to shoot basketball hoops.
All age groups benefited from a new felt freedom to entertain friends:

> *"My little one likes one of his mates to come over, it's alright - the other place wasn't that big so they would just stay outside 'til dark and play. She (18years) didn't want to bring nobody over, over there [at the old place] 'cause of the tightness and not his (her brother) own room and that. Even me (57 years), I didn't like bringing any of my mates over but now I don't mind, we just*

sit out here in the 'dog-box' (the attached garage area) and have a talk and everything." The mother of this household (who is chronically ill) enjoys visitors from her homeland: "We're happy about that, two came around and bring her fruit and have a talk to her (in her native tongue)… talked all night 'til 5 in the morning, catching up on all the gossip, she was happy. We had no room for people to sleep at the other place."

With increased communal space, several families noted a change in visiting patterns by extended family:

"Before the HHP, she didn't really like anyone visiting because house was too small, whereby everything was crammed, making the place very untidy. But now her and her family enjoys having friends over because friends/family always say that they have such a lovely house."

"A bigger house and they like to come. More space for talking, before they were outside (no room inside). The kids play outside or in the garage and the adults have cup o' tea and we can do some bible study or something like that." Father: "I am the one who writes the music for our church. We do the Sunday school, I counsel the youth, every week on Wednesday we have bible study and they come here. It's very happy for us they come over here, there is room now and they bring their children and at the finish we have a cuppa. In the old house we would be squeezing in. We are happy to have room for everybody."

For family get-togethers:

"We tend to use our house more because it is bigger for family dinners and meetings over here."

Although separated, this mother (of seven) commented:

"… a couple of months ago my father-in-law died and they all got together here, I said 'look, do come over home… the boys would love to see you.' Since there is more space it is easier to do that."

A home is linked to our sense of identity and pride in improved surroundings makes a difference to offering hospitality (Thorns, 2004).

"Once I join this programme everything change. I feel proud because it is clean. I love my cleaning. I invite friends and family over and we have cups of tea or lunch. I'm not shame like before."

As most participants cite Māori or Pacific cultural connections, concepts of wellbeing will differ from the dominant Pākehā model. The offering of hospitality and sharing food with the extended kin group, practising whanaugatanga, is incorporated in notions of Māori/Pacific wellbeing (Durie, 1997). The capacity to meet these specific responsibilities through more spacious housing can be empowering for family groups, as illustrated in some of these case studies.

4.2.8.7 Meals

An enlarged open plan dining/living area has allowed a family of nine to share mealtimes:

> *"We can all sit at the table although some [people] have to sit over here (at the breakfast bar). I am looking for an 8-seater table but they are hard to find. (laughter)."*

An enlarged living area/kitchen has facilitated two children in wheelchairs being able to manoeuvre around the bench and refrigerator, enabling them to be independent with the preparation of snacks and drinks, they enjoy this freedom and their mother need only prepare main meals for them.

A sheltered backyard is used to have barbeques when family visit:

> *"We have this space here and we put up our gazebo and have space for the kids, for nieces and nephews, tables up. They come over more now. There's less mess (eating) outside."*

> *"Because we're still pretty much in the same area, we're still in contact with friends and family and other activities."*

4.2.8.8 Involvement in community/neighbourhood

Many with increased communal space reported that it facilitated greater community involvement, particularly for church meetings.

> *"We are more involved in the community; we are now back at the church."*

> *"We do have more church meetings here now with the space. I suppose before it was old is another reason why [we didn't]."*

A sole parent who moved house commented that there were fewer temptations for her teens*:*

> *"The place where we used to stay there was a lot of criminal activity and a lot of other teenagers… my boys would get involved no matter how hard I tried. I was really stressed, someone knocked on my door in the middle of the night."*

Her new place is well fenced and she feels secure, her boys are getting into less trouble.

Another group also found that a change in locality provided security and other youth in the street had a positive affect on leisure time:

> *"They play outside in the summer. They play rugby at the end of the road (cul-de-sac just outside the house). When the whole family meet together there are a lot of young boys under 20. When they meet together they love to play rugby together. Our daughter (6yr) can play across*

the road at her school friends. The families around us, we all get on well, they don't have loud parties or anything. We all get on well."

A small number of households experienced less involvement in social activities because of the distance after relocating:

"The boys play less sport because we are further away. The boy who works at New World has to work when rugby is on. My eldest one was working Saturdays too when he has a job."

"We're a lot further away from our friends, families and church so we're not in regular contact with them like we used to be at the old address. Without the use of the car we wouldn't be able to participate in a lot of activities because we're further away from everyone."

4.2.9 Financial effects of the HHP

The majority of the households interviewed exist on very little income, with a large proportion going towards rent and bills – leaving little for food and other provisions. There were a range of perspectives about how the HHP had changed their situation, from greater ability to pay bills, to struggling with the increase in rent in a new residence. In many cases, the increase in cost for bills was an acceptable trade-off for the underlying structural changes the house, such as larger rooms and more hot water being consumed with an extra bathroom.

Budgeting advice was of help to a few households interviewed, although this part of the HHP intervention was not communicated frequently.

"Normally, before my phone is disconnected, but now I know how to control my financials… We save a lot now because I know how to do budgeting now."

"We can afford a transport for us now. We got a car - van for us to go to church. My daughter drives us around. We can't afford anything before."

There was large variation in the effect of HHP interventions on the cost of utilities in the households. Some decreased because of fewer people in the home; others were facing more expensive bills due to higher electricity consumption.

"The power bill was higher when her house was overcrowded. But now power bill has decreased."

"Our heaters are hardly ever on; I've been turning it on lately because the kids have been sick. So the power is not too bad, my dad is always energy efficient. My kids are learning to turn lights off and it was expected when they made the place bigger."

The change in cost of utilities was acceptable to some tenants, due to the benefit that accompanies the cost:

"The power bill has increased, due to more rooms. Also her daughter's room is very big (size of a lounge), therefore it takes more time to heat up. Interviewee said that they don't mind that their power bill has increased because they are so happy with the improvements to their house."

A common response to the cost of electricity in particular was not to use the heaters and reduce showers per week per person.

"We never use the dryer and heater now because it's too expensive."

They keep hot water costs as low as possible; the children shower once a week before church and parents daily.

Several households used a 'pre-pay' electricity meter, allowing credit to be loaded on for powering the household. This method (the 'Easi-Meter') did not incur reconnection charges as a regular power supply would when cut off, and this was of great concern to the households as it allowed them to 'top up' credit when they were able.

"We still use the Easi-Meter, like we did at the old place. Usually just a $20 card is enough to last the whole house for a week."

"We get $40 a week put on the EASIMETER card. I like it, we've had it a long time - if that runs out of power it doesn't cost you $70 to have it put back on; just go up to [service station] to put money on the card."

Although life is much happier for both of the next two households, making ends meet is a constant struggle:

"… My wife is a sick person… I have to support her and buy her medicine every week. Our old house was $240 week rent. This house is $80 per week more at $320."

The same family experienced seasonal difficulties:

"In the winter it is a harder as he does not earn the same… He tries to minimise these problems by working 3 jobs."

Another large family spoke of the financial benefit of living together with their parents.

"[Dad] is always buying milk and bread so we never run out of that even when we run out of money."

Rent was cheaper in one instance but for most it had gone up. Some households commented that they found it easier to pay rent, although the reason was not always clear. The issue of increased rent after involvement in the HHP is followed up in the Obstacles section.

"The rent is cheaper, which gives me more money for bills."

"Able to manage rent, even though it has increased."

"At our old place we had 3 regular incomes because my two daughters and son-in-law were working and there was my benefit to support the financial commitments of the family. Now that we have moved out and my youngest daughter is training to be a teacher and living off the student allowance, money has been tight because my benefit is now used to pay for most (if not all) bills in the household."

"We have more bills/debts to pay. We brought furniture on hire purchase, another car on hire purchase, which isn't working but we're still paying HP off, and a higher rent to pay now."

"At our old place bills were easier to pay with the income available. Now have to survive on the mother's benefit from which power, telephone, rent payments are deducted automatically from her bank account. Usually after all the bills are paid she has approximately $50 in the hand."

One tenant commented:

"I would be so happy if the rent money went towards buying this house. When I look at the money spent on renting house, I do not feel like it is my real house, it is a waste of money…"

4.3 Obstacles to success from the householders' perspective

During the course of household interviews it became clear that, despite resounding successful outcomes from the HHP, some tenants talked about perceived obstacles as effects on their households. These largely centred on financial issues, persistent health and safety problems with outdoor areas, and the enduring cold temperatures inside their homes. A small number of households had other grievances based on specific concerns such as maintenance and special needs.

4.3.1 Increase in rent/bills since involvement in the HHP

A number of households were disgruntled with the increase in the rent they were required to pay since becoming involved in the programme. It is important to note that the procedure for calculating rent is determined by HNZC[7], and not the HHP specifically. Nevertheless, the impact of the intervention was sometimes overshadowed by the household's impression of higher rent resulting from the programme. Tenants sometimes stated that they were not aware that the rent would increase until after the intervention.

[7] See page 44, person communication from the HZNC project manager on calculation of market rent and in the section about obstacles to the HHP programme.

"The rent has gone up because house is much bigger. Moving here the cost of living has gone up. Most of my husband's wages goes on paying the rent.

"The rent's gone up $20 from $180 to $200 now. We were shocked at the raise. We've also got HP and credit card repayments to meet and it's a struggle to find money to pay rent at times especially when you have a family funeral or wedding to help with finances – it would be a bigger struggle for my partner."

"Rent is automatically deducted from my pay; the only difference is that it is increased now from $165 at the old place to $178 at this place. We weren't aware of the new rent when we shifted."

An increase in electricity bills was commonly mentioned as another financial obstacle, however most tenants interviewed did not appear surprised due to the connection between increased space and hot water consumption.

"The electricity bill has risen because there are two showers in the house that are being used (lots of hot water)."

"Hot water, that's another problem. We usually, every two months, we have a family meeting and I talk about 'Hey look guys, the power bill has come up since we've been here' and I talk about 'How about taking it easy on the showers, and turn everything off (lights, etc.) and that."

"Since they have two bathrooms they tend to use more hot water. Therefore the electricity bill has gone up."

4.3.2 Enduring concerns with safety outdoors for children and households

Concern around safety and risk of falls on slippery outdoor surfaces (especially after wet weather) was referred to in a number of household interviews. Whether existing or new surfaces (such as decking areas), the safety risk was identified as requiring attention.

"The ramp at the front is not very safe for my babies as when it rains they slip so we walk around it through the garden when it rains."

"Outside deck is very slippery; [oldest daughter] slipped down the stairs and severely bruised her back and bum so people have to be careful when walking on the deck after rain."

"When it rains it is very slippery on the front deck and the awning is not wide enough to protect the window sills – they become damp and this leaks into the walls and has ruined the curtains on the windows."

Outdoor yard areas were also identified as presenting risk, particularly for child safety. Flooding and the lack of fencing were the main issues in this area.

"The back section floods badly, it's really deep so that a child could drown in it. I rang them and a man came to take a photo of it. Someone came to evaluate it and said to flatten the

whole ground area but they didn't do anything. The ground is wet and soft after the rain and the big puddle fills up, mosquitoes in the summer."

"We did ask for a fence at the front to keep the kids in. The grass is all muddy and you have to park where the big puddle is - we'd like to fix it ourselves. The back porch, has a new small deck - when we shifted in there was no rail, they said they don't have to do it under a certain height. Our TM came around and said 'Have the kids fallen off?' I don't want to wait till they fall off. Dad has put this up but she said we should take it off."

4.3.3 Lasting problem of cold, despite changes to some households

"At times her house is a bit cold, her kids tell her to make a fire but doesn't like that idea because her kids might play with the fire."

"Even though they have put carpet throughout most of the house, it is still cold."

"She would like aluminium windows to keep the draft out. Also she had to make snake drafts to put under her doors during windy days."

"They said they insulated the house when they added on, it always used to be cold, but I think it's just a big house. This living area is alright as it has a heater. When the door opens you can feel the breeze coming in. The two little ones haven't been well actually, just like on and off. The health of the household has not really changed, the house is still cold, the size is good. They have opened out the living area, taken walls out and pushed the outside wall out. We had a fire at the old house but it wasn't doing anything, it didn't make the house warm. Dad used to like lighting it up but it wasn't warm so they took it out. Heating is hard in a big house."

4.3.4 Difficulties around relocation and organisation

A move during the Christmas holiday period led to confusion around access and sewerage problems:

"They rang us, they were supposed to get the key on the 21 December but it was the 22nd. They said everything is fine and when we started to move our gear there was a wrong key for the garage. We put our stuff inside the house, plus it was rainy day in Xmas week. Some stuff in the house, some outside the house. It took 3 days for us to move house because it was raining because the garage was not open. I rang them and they said they going to send the man and the man came here with the wrong key. The man came after Xmas on Wednesday the other week. Everybody was inside because it was a rainy day, nobody out there- squeezing in everywhere with all our stuff... It was really very difficult that week… The septic was not checked either - the other side on Saturday I just opened the door and I saw all that (sewerage) everywhere. They came to fix it but they never did it properly… A new toilet had been added in to the pipe. They never did their work properly; they were in a rush because it was Christmas week. There was mess everywhere on the ground."

Another household was moved out of their home for HHP renovations. The temporary accommodation was difficult for some members of the family:

> *"Had to move out for about eight weeks and we lived in a top storey house. It was quite weird really because my parents are quite old and they put us in one of those upstairs downstairs houses. Mum and Dad found it really hard; the toilet was the worst, it was up the top, and they slept downstairs. That was the odd bit - it was one of those things because we were getting our house done up. That was maybe two years ago in the winter. But it was good in the end."*

4.3.5 Functional problems for chronic illness/disability

> *"The shower is difficult for me, I asked the man to put it a little bit down but they say they have to put it there. It's too high and too hard. The switch is up the top. I have to call for someone to turn it on and off."*

4.3.6 The disruption that arises when a household is required to move

When a household is required to move a number of obstacles to a successful outcome can occur. Among the disruptions is separation from gardens and distance from shops, places of work and friends.

> *"Misses her old place because she did a lot of work in the garden, whereby she planted her banana tree and sugar can and wishes she could've taken these trees with her because now she has to start all over again."*

> *"We didn't feel like moving, just redoing the house we live in. At our old place I could walk to do shopping; now I have to catch a taxi if no one is here to drive me. This works out to be more expensive, which can be very stressful. I get tired of asking people to take me shopping and I get angry because can't walk there - very far."*

The interviewers provided the following examples from their recollections of their conversations with some householders.

> *Interviewee said that she was happy that she had somewhere to live. However when she moved her there was a lot of work (cleaning) to do around the house. This is because the people who used to live here probably had trucks, whereby the lawns were very muddy. She said that she used the spade to straighten the lawn out. Interviewee said that now her house looks nice, but had to work hard to do it.*

> *Interviewee said that there has been a big change because where they used to live it was closer to her job, which meant she could do as many shifts as she wanted to. But now she can no longer do as many shifts as she used to because it is a bit of a way to travel from the house they are now in and also it cost too much petrol to go back and forwards. Therefore she now gets less hours at work (less money).*

L is distressed and tearful when talking of her social isolation here in Otara. She does not socialise with the neighbours who are Samoans because they sing/drink around the children and she does not want that for them. Her mother-in-law is keen to help with children and transport and education but she is in Mangere. The children are very happy when they visit their cousins in Mangere and cry when they leave.

4.3.7 Maintenance is the cause of problems for some households

Some of the workmanship is not of the highest quality.

> *"It's the kids' job to keep it [walls] clean, but the paint chips easily. One of the walls in the hallway is cracked and a man came and plastered over it. In the girls room it was leaking right over my daughter's bed; the ceiling hung down and they came and sorted out the roof and took the ceiling off and fixed it but it's still leaking - there's a stain there. People come and fix it part way and go away leaving a mess and it often never gets painted over."*

> *"The lino [in bathroom] is bubbling up. They have fixed it once but the problem has recurred, last time it was re-laid on wet timber, it was not done properly and the problem has got worse. Maybe they are waiting for me to fall down on the ground and they come and do it, (laughter). They will not alter the shower fitting that is too high for her to reach."*

> *"The garage floor is always wet, worse when it rains - has to move her stuff around and lift it off the ground to keep it dry, was told to dig a drain along the side of the garage - she disagreed: it is not our work to do it; they are supposed to do it everything before we moved in. "You see all my stuff here; there is nowhere to keep it dry. She was told to take it inside; there is no room inside to move then. The Housing person will look for something to put on the floor to raise things up - perhaps a pallet."*

4.4 Beyond the householders' perspectives

4.4.1 Wish-list

Tenants involved in the HHP were asked to explain what other things would improve their living environment - a 'wish-list' of changes to their homes. The following excerpts show the kind of additions that are important to this group of tenants, and what dreams they have for their perfect homes.

> *"Would like a fence built in the front of the house and also security lights. This is so that they know whether someone is coming on to their property (this is for security reasons because someone was recently raped not too far from where they live, and they are worried about the safety of their daughters)."*

> *"A fence around the property."*

"Wishes that the hallway was wider because the wheelchairs tend to scrap along the walls, which leaves marks; and that the outside [front part] was concrete, so that the wheelchairs can go around without getting mud in the wheels. Interviewee said that when the children come into the house, dirt is usually brought in with the wheelchairs, which means that there is more cleaning to do."

"Would like the roof from the house to be extended to the carport, so that when her children [in wheelchairs] go outside they won't get wet, if they get wet, they could easily get sick."

"Needs a medicine cabinet in the bathroom for her son's medication."

"A garage for the car, and the hump at the beginning of the driveway to be fixed. If you don't know how to drive up the driveway you will always scrape the underside of your car. We've informed Housing NZ and we're still waiting."

"Another toilet upstairs, Pink Batts [insulation] in the walls because it's freezing, carpets downstairs in the living room, fixing the cracks in the floor that reveals water, dirt, grass under the floorboards."

"A balcony outside the sliding window in the kitchen, because the step outside this window is far too low to step down safely. Non-slip mats outside on the deck to avoid slipping during rainy conditions."

"The toilet space is not wide enough for the door to open fully. Every time someone opens it, it hits the toilet bowl and because the door has a glass pane on it, am afraid it will smash and hurt someone seriously."

"The shower in one of the bathrooms is too small to shower comfortably (cramped), and the basins are set at a low height, straining the back."

4.4.2 HHP in the community

A question was asked on the importance of the HHP intervention in the community. Not all tenants were able to give answers, but some alluded to low awareness of the HHP in their neighbourhood, although they were confident that people would like to be involved to achieve their own 'healthy house'. An interesting range of comments include:

"There are a couple up the road - some at church, one near my sister and another Nuiean family."

"The people from church are quite surprised that we are in the HHP and would like to also be a part of it."

"I don't think they know much about it and sometimes they've been turned down many times they begin to feel angry and sad because they want something good for their families too."

"If the community can see how much better the improvements are compared to their old houses they will support it. But they need to check first about how much rent they will have to pay and whether they can get some assistance towards paying the rent on the new place."

4.4.3 Overall connectedness to home

While a specific question around connectedness to the home was not included in the interview schedule, tenants were asked how they would feel if asked to leave the house 'tomorrow'. A clear pattern of strong ties to the homes came through from the responses, indicating that despite living in rental accommodation, the tenants place great value on the significance of the home as their 'own', beyond the physical structure.

> *"My husband and I raised our kids in this house, we brought family members over from the Islands in this house, we entertained friends and family in this house. It has a lot of memories for us and I would miss it if we were to shift."*

> *"My daughters and granddaughters like the space available at this house; its newness of everything, and its location to Manukau shopping centre and transport."*

> *"They enjoy the independence of having their own space and because they liked that they say they chose the house with my wife, so it's like a dream house for them too."*

> *"This house is perfect for us, and we might not get a better house to move into. This location is good for us too because it's close to my children's schools and my husband's work."*

> *"[If had to leave] I would feel sad because kids all grow up in this house. I feel safe in this street, I know the people in this street - it's like a little community. You see same people everyday when you go to the shop or when you drop your kids off at school."*

A summarised version of these findings follows in the chapter on emerging themes. This includes the comparative analysis, and a discussion of how the two stakeholder groups (tenants and providers) described the successful outcomes of and obstacles to the HHP.

5 EMERGING THEMES

5.1 Overview

This chapter summarises the findings of the outcomes evaluation of the HHP. It covers the evaluation from the multiple perspectives outlined below:

- The providers' perspectives;
- The participants' perspectives;
- Focus on sustainability;
- State sector collaboration, partnership and efficiency;
- What are successful outcomes?
- What works?
- Threats to successful outcomes;
- A pathway to success; and
- Programme objectives and the evaluation crosswalk.

The aim of this chapter is to present the integrated analysis of the information from the providers' and the participants' interviews. The analysis focuses on success based outcomes and identifies obstacles to success. In essence the chapter aims to provide a view of 'what works' and why, and what obstacles get in the way of successful outcomes. The participants' and providers' perceptions of successful outcomes are collated to form an overall view of success. The final section in this chapter presents summary answers to the evaluation questions and provides indications of achievement in the specific areas of the programme.

5.2 Summary and consolidation

5.2.1 The providers' perceptions

The information from the provider's interviews is divided into a number of areas:

- Aspects of their work that are successful, and why they are successful;
- Perceptions of the successful outcomes for the participants, and why they were successful; and
- Perceptions of obstacles to the successful process of their work are described and the reasons for those obstacles suggested.

A number of themes emerged from the interviews with the providers. The providers felt success hinged on strong, effective interagency collaboration and support, particularly between HNZC and the DHBs.

The providers were asked to comment on the most successful facets of their work, and then outline the successful outcomes of the intervention. Further, they were asked to describe what they considered to be the reasons for these successful outcomes. Comparison of these data allows us to create a pathway from their work to the outcomes.

The following table describes the providers' perceptions of the reasons for the success of their work. Overall, the providers believe the success of the programme rests heavily on their ability to interact with the families. Two areas appear to contribute to the success of the providers work process. The first relates to the skills underpinning the providers' role such as high levels of knowledge and expertise, communication skills, and cultural awareness. These factors are all associated with engagement with the households. The second relates to practical aspects of their work. That is, their work is solution focused, they take all available opportunities to educate, and they are strong advocates for the families.

Table 4: Summary of providers' views of the success of their work from the perspective of DHBsand HNZC and their interaction with the families

Success criteria	Reason for success
Attitude of staff	Non judgemental Non threatening All needs are different Now understand mental illness 'not just nuts' Give appearance of having 'time' Start each time with 'blank slate' - every family's needs are different Holistic 'Working-with' not 'doing-to' Don't give up
Cultural awareness	Importance of keeping families together Strengths of extended family Awareness of family connections Cultural link to community connection Housing and Health staff from a variety of cultures
Communication	Assessment format very comprehensive but open Listening skills Identifying main issue for family Language needs acknowledged and interpreters used Encouragers Honest direct sensitive chats with mums re muddle in the home and giving opportunity to change
Nursing expertise	Clinical expertise Refined assessment skills Pick up clues Look for risk factors Observational skills
Advocate	Know systems Make sure people know their rights, e.g. benefit entitlements That family wishes are heard Link with government, support and community agencies
Ongoing supervision	Housekeeping education, support and encouragement Regular follow-up by CHW Is a mum herself and is bilingual AC now do six week follow ups and considering return at 6 and 12 months

Follow-up of issues identified	Health Financial Resources – e.g. furniture/linen Social Maintenance of social skills
Educators	Look for opportunities Practical actions Health advice Reducing expenses Housekeeping strategies Breaking situations down to manageable tasks

The following table rovides an analysis of the providers' views of the success of their work from a joint DHBs and HNZC perspective. Overall, the providers believe the success of the programme rests primarily on the collaborative partnership between HNZC and the DHBs. Perceptions of success of the partnership fall into three categories. First, attitude, support and communication towards each other; second, the high level of knowledge and expertise, adherence to a solution focused approach, and a fast response strategy; and third, a high level of management and policy support for their partnership.

Table 5: Summary of providers' views of the success of their work from the perspective of interaction between DHBs and HNZC.

Success criteria	Reason for success
Attitude of staff	Holistic Respectful Getting on well with each other Look at situations from bigger perspective
Knowledge	Overview of community issues Housing now understand health issues Health now know what people entitled to from HNZC PHNs giving mini education sessions on specific health issues Increased knowledge of communicable diseases Housing now know how to care for and prevent skin sores Better understanding of each others' roles
Communication processes	Frequent use of phone and email to keep each other up to date Regular fortnightly meetings to follow up on action plans and housing decisions
Solutions focus	If there is a solution to be found we will find it Work together creatively for the best of the family Work together to do what is needed for the programme to succeed We don't leave the meeting till we sort the problem
Collaboration	Communication processes Meetings Culture Partnership Networks
Strategies when urgent – high risk need identified	Management support Safety strategies Child abuse/risk processes in place Address urgent first then follow- through on rest of issues Partnership approach when urgent high risk need identified
Executive support	Housing now a key indicator for the DHB On each other's operational and Ministerial agendas Giving tool for health to be on HNZC's strategic agenda

The following table describes the providers' perceptions of the obstacles to successful outcomes. While there is overwhelming support and satisfaction with the programme, the providers suggested a number of obstacles from the perspective of their work that could threaten success. These fall into a number of categories. First, issues related to the tenant, such as 'no shows' [8], second, funding and the threats to on-going funding; third, legislative and council issues; and finally, the on-going support of Neighbourhood Units.

Table 6: Summary of providers' views of obstacles to the success of their work.

Obstacle	Reason for obstacle
'No shows'	Non delivery of mail introducing the programme and inviting them to participate Reluctance to open HNZC mail and wariness of having HNZC visit Unpredictable employment opportunities Information is provided in English
Ongoing funding	Awaiting this evaluation for Treasury decision What implications will result from outcomes of forthcoming elections Increasing staffing resources will be determined by continuation of programme
The Neighbourhood Units	Impact on the workload of the Neighbourhood Units Expectation that they will address ongoing maintenance issues High turnover of TM staff Repeated need to get buy into the project from new staff Unaddressed assessment for transfer Uncompleted maintenance Availability of appropriate housing stock
Delays to the re-housing process	Council zoning restrictions Council building consents Availability of OTs for disability assessments
Legislation	Income related/market rents Definitions of what constitutes a core family – and thus who can be counted in the occupancy tally
Support from other agencies	Inadequate liaison to let them know about project and impact on their service
Responsibility	MOH restrictions on what funding will and won't cover Poor communication between services involved

The providers were asked to describe successful outcomes that were thought to be a consequence of the programme. All of the providers had very clear views of the successful outcomes and the reasons for this success. The themes for the outcomes all involved partnership and communication with the community. The providers saw a greater level of engagement with community. They felt there was more effective communication, and an increased opportunity to engage with tenants. The providers claimed that they used their expertise and communication skills in a genuine manner to engage the family. They also claimed that the community appeared to be more involved and interested in the programme, and the programme provided a useful link to the community. Providers considered that the programme had tremendous practical value, in that the HHP plans are being rolled out regularly, they see a higher standard of housing, and overcrowding is being reduced. Further, the claim is that the joint

8 'No shows' occur when tenants are not at home when the PHN and AC/TM visit at an appointed time to do the Joint Assessment visit.

philosophy of the programme leads to joint solutions, and there is an increase in maintenance of the houses.

A final area where the providers believe that they have observed change is in participant wellbeing. The health assessment led to a better level of care, and the tenants appear healthier, physically, socially and psychologically. The change in house-keeping skills and a more understanding attitude to overcrowding means healthier and happier families.

The theme that emerges from the reasons for successful outcomes are the same themes identified as the most successful aspects of the providers' work to implement interventions.

Table 7: Summary of the providers' views of the success of the effect of the intervention

Success criteria	Reason for success
Effective communication with tenants	Non judgemental attitudes Ability to establish rapport and do assessment Focus on listening skills Identifying what is the person's main health issue Using interpreter services Development of simple basic information sheets when needed (e.g. best ways to treat/prevent mould)
Health assessments of families Healthier people	HHP gives PHNs the opportunity to access houses they normally would never have access to Get in-depth perspective of problems within the home environment Time and expertise to do an assessment that identifies health and social needs, and then develop and implement an action plan
Modifications to address a disability	Can do modifications MOH can't fund
Solve a recurring maintenance problem	Clinician's report drives need for a solution, e.g. sewer
Community buy-in	Neighbours encourages others to be involved Community wanting people included
Identify and address overcrowding	Doing the occupancy review from a non-judgemental perspective Having personnel dedicated to providing best options for each family
Employment opportunity	Intervention gave an interested and willing dad the opportunity to become part of painting team
Education opportunity	Intervention got mum out of a muddle and gave her the belief she could achieve Give person positive feedback re skills noticed and opportunities available for education
More positive attitude to life	Give healthier environment equals healthier thinking Invited to consider where they see selves in 5 yrs Identifying/addressing loneliness
Reduction in disease	PHN identified to HHP clinician that risk factors for cellulitis being missed in primary care – he instituted education programme with GPs Linking into exercise groups Linking people in with GP for screening and immunization needs
Kids off streets	Kids have 'own' space at home Moved away from bad influence
Roll out of household management plans	HNZC is beginning to use HHP plans/approach organisation wide
Standard of stock is raised to accommodate higher use.	More durable facilities require less maintenance.

Improvement in housekeeping skills	Regular follow-up by CHW CHW guides mums towards positive goals – tidy home Putting family in transition home or new home gives a fresh start; they can experience an un-muddled environment. Provision of language specific education materials, e.g. cleaning tips
Link into the community	Green Rx run exercise group connected them with supportive community network PHN walking with the granny to the nearby preschool services and introducing her
No re-crowding	Education re the risks of overcrowding and link with disease On going supervision checks
People would like to buy their home	Home meets their needs and is of high quality
Popularity of HHP	Other services ring and want to refer families into it OTs want it to move into other areas of similar high need

The following table provides an analysis of the providers' perspectives on the obstacles to successful outcomes for the participants. Overall, they could not see many obstacles. One area of interest that was identified is the care of property, particularly the house upkeep. Providers claimed that tenants needed more support and education with these tasks.

Table 8: Summary of the providers' views of the obstacles to the success of intervention effects.

Obstacle	Reason for obstacle
Recurrence of original problem – re-crowding	Pressure to accommodate extra family in what to them seems loads of space
Recurrence of original problem - poor house keeping skills	Need for more focussed supervision
Care of property	Lack of understanding of need for ventilation and measures being used Lack of understanding of sources of moisture and implications on home and occupants Need for more supervision

5.2.2 Participants perceptions of successful outcomes and obstacles

The participants' perceptions are also described in terms of successful outcomes and obstacles and the reason for these outcomes. To gain an understanding of the different aspects of the interventions the information is analysed across suburbs (i.e. Wiri and Otara), and across time (i.e. those who joined the programme early and those who have recently joined). Further analysis is conducted by type of intervention.

The participants' perceptions of the outcomes are collated to form an overall view of success and the reasons for that success. In particular, the families expressed a higher level of pride, comfort, and happiness in their homes and lives. The participants recognised a number of changes related to family functioning, psychosocial resources, improved health, and safety.

The following table represents the household's perceptions of successful outcomes compared across suburb and year. The outcomes are reasonably standard for both suburbs and across years. These outcomes relate to: functionality - the family is much more connected, and day-to-day life is more manageable; participation in the community and community activities such as education, church, employment also appeared to be a common outcome; and increased wellbeing was seen as a common factor. In physical health, for example, the participants saw a reduction in respiratory and skin disorders. Finally a common outcome raised by families was a greater sense of safety.

The household members' involvement in selection and the decision making process in the HHP is one aspect that is a point of difference between the suburbs: Wiri, is the only suburb where this appears to have occurred. This is a critical factor, as it is these added dimensions (involvement in selection and decision making) that brings about empowerment.

Table 9: Comparison of successful outcomes criteria and reasons for Otara (2002/2003) and Wiri (2003/2004)

Successful criteria	Reason for success Otara 2002/3	Reason for success Wiri 2003/4
Family connectedness	Increase in space has several effects: Able to have meals together Less stress Communication better without crowded house More privacy	Increase in space Able to have meals together Less stress Communication better without crowded house More privacy
Sibling relationships	Reduced sibling rivalry Own bedrooms, or not sharing with several siblings Privacy 'Own' space to play, escape	Reduced sibling rivalry Own bedrooms, or not sharing with several siblings Privacy 'Own' space to play, escape
Study/educational activities	Space to study Quiet, allocated space to do homework, or can go to own room Fewer disruptions, particularly for adults furthering education	Space to study Quiet, allocated space to do homework, or can go to own room Fewer disruptions, particularly for adults furthering education
Social life/community connection	Able to host guests, house pride, less embarrassed to have family/friends over Room to host church, community meetings	Greater involvement More space for hospitality Now inviting people into home
'Easier life', day-to-day functioning	Less stress with household relationships Extra bathroom Bigger kitchen More content with life, despite struggles	Extra bathroom Larger kitchen Coping mechanisms improved More able to cope with stress and high health needs More content with life, despite struggles
Housekeeping and 'house pride'	Surfaces easier to clean More space and rooms, so children's mess not in lounge/communal space Tidiness, want to keep house 'looking nice'	More attention to cleanliness Kids keep own rooms tidy Appreciation for improved living environment, want to keep it 'nice'
Reduced accident/injury risk	Structural modifications, such as sharp edges removed from kitchen bench top	No longer sharing driveway means children less at risk of other cars
Reduction in asthma and/or eczema	Warmth of house, fewer allergens	None offered
Increased financial control	Budgeting advice	None offered

Successful criteria cont:	Reason for success Otara 2002/3	Reason for success Wiri 2003/4
Increase in comfort of home	None offered	Less mould Less dampness Added insulation Carpet Curtains
Mobility/function for residents with disability	None offered	More space Specific modifications for disability (particularly bathroom, sleeping arrangements, access to communal areas) Increased independence Relieve stress on caregiver (physical and mental)
Tenants connectedness to household	None offered	Involvement in selection of house and decision-making
Safety	None offered	Feel safer in new neighbourhood (removed from unsafe activity)

The following table present a comparison of obstacles as seen by participants in Otara and Wiri. The obstacles that the participants raised are very similar to those of the providers. They include finances, rent, and increased costs as a consequence of the house change. Further, there are concerns about the grounds outside, as many felt they detracted from the pride they felt in their home. Of interest, is the concern raised by a small number of families in Otara relating to the persistence of low temperatures in their house, which is some cases could be somewhat attributed to the householders' reluctance to use heating.

Table 10: Comparison of obstacles and reasons for Otara (2002-2003) and Wiri (2003/2004).

Obstacle	Reason for obstacle Otara 2002/2003	Reasons for obstacle Wiri 2003/2004
Increase in bills post-involvement in HHP	Increase in space costs more to heat, extra bathroom using more hot water, lighting	Increase in space costs more to heat, extra bathroom using more hot water
Enduring low temperature inside	In spite of carpet and/or insulation, some houses still cold	None offered
Poor state of outside areas	Inadequate drainage, flooding, muddy lawn	None offered
Unsafe surfaces outdoors in wet weather	None offered	Slippery decks, child safety
Inadequate fencing around property	None offered	Child safety beside road
Difficulty paying rent	None offered	Increase in rent post-involvement in HHP that residents had not expected

The following table presents a comparison of the householders' views of success, as analysed by intervention type and health need. There is a range of outcomes across the categories, and it appears that the more extensive intervention (such as major alterations and room additions) result in more comprehensive outcomes for the households.

Table 11: Participants' views of success outcomes and reasons by housing intervention type and health/social needs.

Housing Intervention	Health/ Social needs	Success outcomes and reasons for success
Insulation, ventilation and heating (IVH)	Minimal issues	**Small increase in comfort of home** Upstairs warmer, but rest of house still cold
IVH	Moderate issues	**Increase in comfort of home** Insulation and heaters
IVH	Significant	**Increase in comfort of home** Insulation, ventilation **Reduction in children's housing-related illness (asthma, eczema)** Warmer house Cleaner, drier **Increased financial control** Budgeting advice **Reduction in stress** Fewer people permitted to reside in house Improved family relationships
Modernization	Significant issues	**Increased mobility and independence for residents with disability** Better access to bathroom amenities Care taken not to modify layout of house which would have disrupted familiarity for tenant with impaired vision **Reduction in stress** HHP instruction to reduce crowding allows household to decline extra family members from staying with them **Safe play area for children** Fenced yard visible from inside through window **Improved day-to-day function** Extra bathroom **Improved relationships between family members** Own space for teenage children Reduced fighting Privacy **Improved social connectedness** Space to host family for meals **Improved education/study activity** Space and quiet to do homework/study Fewer distractions (inside house and outdoors)
Specific modification	Moderate issues	**Improved day-to-day function** More space Extra bathroom (modified for special needs) Access to kitchen improved **Reduction in stress** Children more independent **Reduction in risk of injury** Space to operate hoist means caregiver not required to lift children to/from bed
Extension	Crowding and minimal issues	**Reduction in stress** Reduced sibling rivalry

Housing Intervention	Health/ Social needs	Success outcomes and reasons for success
		Children have own rooms for noise, activities Privacy **Improved education/study activity** Space and quiet to do study **Financial control** Able to manage rent, even though it has increased
Extension	Crowding and moderate issues	**Reduction in stress** Reduced sibling rivalry Children have own rooms Parents have own room/privacy **Improved day-to-day function** Extra bathroom Bigger kitchen **Improved child safety** No longer sharing driveway with associated risk of neighbours' car and children **Improved comfort** Carpet Curtains More natural light Easier to clean **Improved community involvement** Return to church activities
Extension	Crowding and significant issues	**Improved day-to-day function** Increase in space Extra bathroom **Reduction in stress** Tenants able to find space, privacy Less sibling rivalry **Improved family connectedness** Able to have meals together **Improved social/community connections** Able to host family dinners, church meetings, etc.
Extension	High and complex issues	**Reduction in stress** Increase in space Larger kitchen Privacy **Increase in comfort** House warmer Doors and windows aren't broken More natural light **Improved education/study activity** Children now have place to study **Reduction in risk of illness** Vulnerable family members not exposed to risk of illness through reduced crowding
Part household transfer	Crowding	**Reduction in stress** Own space and independence **Improved family connectedness** Space Able to have 'quality time'
Part household transfer	Crowding and significant issues	**Reduction in stress** Less noise No interference from extended family Own space and independence **Improved family connectedness** Able to have 'quality time' for self and with children
Household transfer	Significant issues	**Improved family connectedness** Happy to be in larger house

Housing Intervention	Health/ Social needs	Success outcomes and reasons for success
		Own rooms for children More 'settled' **Increase in comfort** Moved to new house, warmer

The following table represents the participants' perceptions of obstacles to success. In general, tenants saw the obstacles as minimal compared to the successful outcomes that involvement in the HHP had given them. The obstacles often relate to outdoor areas and safety, along with enduring cold temperatures within the house and increasing costs such as rent and utilities.

Table 12: Participants' views of obstacles to success and reasons by housing intervention type and health/social needs.

Housing Intervention	Health/Social needs	Obstacle and reason(s)
Insulation, ventilation and heating (IVH)	Minimal issues	None offered
IVH	Significant issues	None offered
Modernization	Significant	**Cold household** Drafts around windows and under doors **Poor state of outdoor areas** Muddy lawns **Increase in power bill** Hot water usage increase with extra bathroom
Modification	Moderate issues	None offered
Extension	Crowding	**Increase in power bill** More space (heating, lighting, etc.) **Enduring financial strain** Still unable to afford adequate food, bills, rent
Extension	Crowding and minor issues	None offered
Extension	Crowding and significant issues	**Disconnected from work/social life** Move to different suburb No longer able to walk to shops Necessary to reduce shifts at work because of increase in travel costs **Increase in financial burden** Increase in rent Use more petrol to get around **Difficult to heat household** More space harder to heat, and cannot afford increase in power bill **Child safety outdoors** Flooding back section
Extension	High and complex issues	**Increase in financial strain** Increase in rent **Injury risk** Slippery deck
Part household transfer	Significant issues	**Reduction in collective income** Shift away from larger family unit means one income now has to cover bills and rent
Household transfer	Significant issues	**Enduring structural problems** Size of bathroom and shower inadequate

5.3 Focus on sustainability

Little research exists on how to sustain programmes such as the one considered in this report. Sustainability is often referred to as the continuation of projects whereas Scheirer defined it as a set of durable activities and resources aimed at programme related objectives (Scheirer, 1994). "When an innovation has become a stable and regular part of organizational procedures and behaviour, it is defined as having become routinized" (Yin, 1979). Many other researchers have used a number of synonyms in association with sustainability, such as adoption, appropriation, durability, longevity, and maintenance.

Sustainability is thought to be a critical concept for programmes for a number of reasons, particularly as sustained programmes can often maintain their effects over a long period. From the participants' perspective there is often a feeling of disillusionment and of abandonment when programmes finish. Further, when programmes are lost there is considerable loss of resources both human and organizational, and many good ideas can be lost because they have not had time to develop or have had an impact. As programme effects in population health often take 3 - 10 years to manifest it is important for programmes to run their full course and to implement evaluations to understand their worth.

There is a dearth of research relating to successful sustaining programmes. However, the review by Shediac-Rizkallah and Bone (Shediac-Rizkallah & Bone, 1998) indicates that certain project characteristics are associated with sustainability of programmes. These characteristics can be divided into: programme issues, the providers, the management of the initiative, the funders/government, and the culture of the innovation.

The probability of programme sustainability is thought to be high when the following factors of sustainability are identifiable:

The programme idea

- Appropriateness of the programme initiator;
- An appropriate solution;
- The intervention is adaptable;
- The programme has an advocate 'project champion';
- Intervention was timely;
- Perceived success; and
- The programme has had an impact.

Providers

- Provider's experience;
- Intervention and provider fit;
- Staff received training;
- Professional expertise;

Initiative culture, management and implementation

- Evaluation plan;
- Collaboration;
- Plans for sustainability;
- Problem solving capacity; and
- Networks – partnerships exist.

Systems Level Support

- Managerial support;
- Integration with existing programmes and services;
- Funding;
- Resources; and
- Institutional strength.

The following Sustainability Checklist was developed from the work of Shediac-Rizkallah & Bone (1998), Scheirer (1994) and Pluye, Potvin & Denis (in press). The evaluation team adapted the factors to suit the HHP. A number of items were generated to represent the observable aspects of the four dimensions of sustainability: system level support; initiative culture, management and implementation; providers; and the programme idea. Subsequently, the team collectively rated the probability of sustainability of the programme based on four levels of evidence: provider interviews; participant interviews; documentary analysis and observations; and workshops. The checklist is by no means an exhaustive list of factors representing sustainability, and this analysis is a preliminary step towards understanding sustainability.

The following tables, (first for housing and then for health), indicate the probability of sustainability for the housing and the health component of the programme. This information is then collated to form an overall view of sustainability.

As is illustrated by these tables, the programme overall has a very high probability of sustainability. All factors relating to the programme were rated highly. In particular it is clear from the research base in housing and health that the idea is a sensible solution to an extensive problem, and moreover it is a timely one. The programme has met its target and is well received by the participants. It is having an impact and is perceived as successful.

The providers offer a high level of expertise, are very suited to the task, and their attitudes and approach to the task is well informed. While there are often issues with staffing, both sectors deal efficiently with these issues. The implementation system of the programme appears to add value to the programme. The degree of implementation is on target and well articulated. Delays, for example, are dealt with and acknowledged, thus there is a focus on solutions. This strategy is supported by both sectors and is seen as a strength for the implementation process. The collaborative culture created by providers and the management system is philosophically very much in tune with the programme. This culture is also supported by a government strategy.

While the tables suggest an overall high level of support for sustainability there are areas that the programme sustainability would benefit from further input, for example,

planning for sustainability from more than a financial point of view. Having well articulated plans for development, evaluation and adaptation add significantly to the on-going success of a programme. While sustainability may be thought to be an esoteric construct, it is important for the HHP to be actively considering it at government, policy, management, and provider levels. The following table assesses HHP against the criteria for sustainability introduced here.

Table 13: Sustainability checklist for the housing sector.

In this programme	*SD*[9]	*D*	*SW*	*A*	*SA*	*Evidence*
A programme champion (i.e. strong advocate for continuation of the project) has been active					X	Strong evidence of the project manger's commitment and involvement
Staff have received:						
Official training				X		Mentoring and Training given on the job New staff mentioned no official orientation had been given
On the job training					X	Interviewees spoke of education sessions
Mentoring					X	
Ongoing support and supervision					X	Mention meetings and performance reviews
The intervention has been evaluated:						
Internally			X			Reporting to steering committee
Externally					X	Initial evaluation + current one
Plans for sustainability have been:						
Discussed				X		Project manager focus
Written			X			
Activated			X			Now do a revisit after 6 week and are planning 6 month revisits
Intervention initiator remains actively involved:						
The initiator has been appropriate for the community					X	
Modifications to the intervention have occurred:						
Undergone change in level of action					X	AC now do Joint Assess-ments in South Auckland instead of TM There has been re-jigging of invite process
Changes in provider				X		Changes and additions where appropriate
Positive changes in intervention staff have occurred:					X	Interview reports of change in attitude and change in knowledge
There is a good fit between the					X	

9 Definitions of rating scale – SD: Strongly disagree, D: Disagree, SW: Somewhat agree, A: Agree, SA: Strongly agree.

In this programme	*SD*[9]	*D*	*SW*	*A*	*SA*	*Evidence*
intervention and provider						
Providers' experience:						
Providers' health experience is high				X		Interview comments indicate knowledge is improving - Now developing info sheets
Providers' housing experience is high					X	House assessment skills are highly refined
Collaboration occurs:						
Between HNZC and District Health Boards					X	Joint assessment meetings Joint action plans Joint fortnightly meetings
Internally within the agencies					X	Neighbourhood Units SPU
With multiple external agencies				X		Interviews describe processes set up with Work and Income, budgeting, City Mission, etc.
Partners in this programme:						
Listened to suggestions					X	Evidence from interview stories
Freely shared information				X		Working together on info folders
Involved in most decisions regarding intervention					X	Joint assessment meetings Joint action plans Interview evidence of solutions focus
Played a key role in the development intervention				X		Development of Joint Assessment
Have good relationships					X	Evidence from interview stories
Competent staff:						
Can deliver the programme					X	Evidence from interview stories, and spreadsheet database reports
Have the skills to deliver					X	Evidence from interview stories. Plans drawn up are acceptable to SPU
Can problem solve in area					X	Evidence from interview stories, solutions focus
Have good interpersonal skills					X	Evidence from interview stories that able to build rapport with tenants
Management is supportive of staff					X	Evidence from interview comments about Project Manager and Executive team
Management:						
Support the intervention					X	
Can solve problems					X	Reflective practice – increasing frequency tenant supervision post intervention to reduce recurrence of problem
Would support intervention in face of controversy					X	
Supports continuation					X	Current evaluation has been contracted with this in mind
Prepared clear strategies for gradual financial self-sufficiency			X			
Readily invest finances and other				X		

In this programme	*SD*[9]	*D*	*SW*	*A*	*SA*	*Evidence*
resources						
There were some implementation difficulties that have been actioned:					X	
Finances					X	
Recruiting participants				X		Problem of 'no shows'
Recruiting staff				X		
Time to prepare intervention				X		
Not enough staff				X		
Time lags and changing tenants			X			
Developing agreed interventions and measures					X	
Perceived success includes:					X	
Clear need for the intervention					X	Health need, e.g. meningitis and cellulitis admissions Housing – ventilation and insulation needs
High level of interest				X		Politically and media
Helped build partnerships					X	Definitely with health
Intervention was timely					X	Addressing meningitis outbreak
Achieving the desired outcomes				X		Increasing health of house Reducing overcrowding Reducing hospital admissions Addressing health issues
Had an impact				X		Success stories
Community support for intervention:				X		
Known about by local community leaders			X			
Mentioned positively by local community leaders				X		
Mentioned favourably by local media					X	Health Innovations Supreme Award
Has community support:						
Ensured that the needs of the community are driving this programme				X		
Developed a consensus-building process to reach a compromise for addressing different stakeholder (community, funder, technical experts) needs			X			
Administration system:						
Plans are articulated					X	
Documents approved					X	
Implementation plan				X		
Evaluation plan				X		
Admin process identifiable				X		
Accepted as policy:						
Discussion of policy implications				X		
Recognised and supported by state					X	

Table 14: Sustainability checklist for the health sector.

In this programme	*SD[10]*	*D*	*SW*	*A*	*SA*	*Evidence*
A programme champion (i.e. strong advocate for continuation of the project) has been active					X	Strong evidence of both area's project manger's commitment & involvement
Staff have received:						
Official training				X		Official orientation procedures, plus project manager input reported
On the job training					X	Ensure staff attend education sessions and maintain and develop competencies
Mentoring					X	Both project managers involved
Ongoing support and supervision					X	Mention of meetings and supervision provided within project, clinical supervision and DHB supported supervision
The intervention has been evaluated:						
Internally				X		Reporting to steering committee ADHB evaluation of follow-up of HHP interventions ADHB review of 'no show' causes
Externally					X	Initial evaluation and current one
Plans for sustainability have been:						
Discussed				X		Both managers focus on this Recognise PHNs are for triage and case management Need for CHWs
Written			X			Overall HHP plans CMDHB now have CHW working with clients on housekeeping skills
Activated			X			
Intervention initiator remains actively involved:					X	
The initiator has been appropriate for the community					X	
Modifications to the intervention have occurred:					X	
Undergone change in level of action					X	Joint assessment questions modified to identify most important problem PHNs do drop by visits to improve invite process ADHB links with OT and HHP procedures more formalised

10 Definitions of rating scale – SD: Strongly disagree, D: Disagree, SW: Somewhat agree, A: Agree, SA: Strongly agree.

In this programme	*SD[10]*	*D*	*SW*	*A*	*SA*	*Evidence*
Changes in provider				X		Expansion of provider networks to include OT
Positive changes in intervention staff have occurred					X	Interviews report increase in knowledge
There is a good fit between the intervention and provider					X	PHNs community-based, appropriate people for close contact with family
Providers' experience:						
Providers' health experience is high					X	Area of expertise and always seeking to improve assessment skills and community resources knowledge
Providers' housing experience is high			X			Markedly improved with input from AC
Collaboration occurs:						
Between HNZC and DHBs					X	Joint assessment meetings Joint action plans Joint fortnightly meetings
Internally within the agencies				X		Allied health services, e.g. OT and mental health
With multiple external agencies				X		Interviews describe interactions with Child, Youth and Family diabetes clinics, etc.
Partners in this programme:						
Listened to suggestions					X	Evidence from interviews and stories provided
Freely shared information					X	Working together on info folders, meetings
Involved in most decisions regarding intervention					X	Joint assessment meetings Joint action plans Interview evidence of solutions focus
Played a key role in the development intervention					X	Development of joint assessment tool
Have good relationships					X	Evidence from interviews and stories provided
Competent Staff:						
Can deliver the programme					X	Evidence from interviews stories, and internal evaluation
Have the skills to deliver					X	Evidence from interviews and stories. Referral statistics
Can problem solve in area					X	Evidence from interviews stories, solutions focus
Have good interpersonal skills					X	Evidence from interviews and stories that able to build rapport with tenants
Management is supportive of staff					X	Evidence from interview comments about project managers
Management:						
Support the intervention					X	
Can solve problems					X	Strong solutions/evaluation focus
Would support intervention in face of controversy					X	
Supports continuation					X	Current evaluation has been

In this programme	*SD[10]*	*D*	*SW*	*A*	*SA*	*Evidence*
						contracted with this in mind
Prepared clear strategies for gradual financial self-sufficiency			X			Evidence not sourced
Readily invest finances and other resources			X			Evidence not sourced
There were some implementation difficulties that have been actioned:						
Finances				X		Ongoing staffing financing
Recruiting participants					X	Continual 'no shows'
Recruiting staff			X			Evidence not sourced
Time to prepare intervention			X			Evidence not sourced
Not enough staff				X		Interviews describe the dream of extending service
Time lags				X		Participants' interviews
Developing agreed interventions and measures				X		Often required to come up with solutions outside of service brief
Perceived success includes:						
Clear need for the intervention					X	Research evidence. Health - meningitis and infectious disease admissions, overcrowding Housing – ventilation and insulation needs, extensions, transfers
High level of interest				X		Politically and media DHB
Helped build partnerships					X	Partnership documented
Intervention was timely					X	Addressing meningococcal disease outbreak
Achieving the desired outcomes					X	Reducing doctor visits Addressing health issues Increasing health of house Reducing overcrowding
Had an impact					X	Success stories
Community support for, intervention:						
Known about by local community leaders		X				Participants do not understand HHP
Mentioned positively by local community leaders			X			Unclear
Mentioned favourably by local media					X	Health Innovations Supreme Award 2005
Has Community support:						
Ensured that the needs of the community are driving this programme			X			
Developed a consensus-building process to reach a compromise for addressing different stakeholder (community, funder, technical experts) needs				X		Discussed, however not clearly articulated
Administration system:						
Plans are articulated				X		HHP documentation overall
Documents approved					X	HHP process and reporting
Implementation plan					X	HHP documentation
Evaluation plan		X				
Admin process identifiable				X		Database used to collate stats

In this programme	*SD[10]*	*D*	*SW*	*A*	*SA*	*Evidence*
Accepted as policy:						
Discussion of policy implications			X			Observations
Recognised and supported by state				X		Funding renew

5.4 State sector collaboration, partnerships and efficiency

The following list presents evidence of collaborative processes and partnership for HNZC and the DHBs, both internally within the programme and with external providers. The categories that this collaboration falls into are: communication, meetings, culture, partnership and networks.

Communication

- Verbal – phone, person to person
- Electronic mail
- Paper based
    - Joint assessment front sheets, assessment, and action plans
    - Clinician's report
    - Formal referrals by PHNs to OT.

Meetings

- Both services attend the joint assessment meeting with the tenant
- Decision making - both parties immediately review, combine and agree the joint action plans developed as a result of the joint assessment
- Review and reflection – both services meet to discuss new cases and update on progress of current cases, and creatively seek solutions if problems are identified
- Informal meetings - to work on special projects, e.g. development of new programme information brochure
- Project management meetings
- Steering committee meetings

Culture

- Respect
- Having same goal/vision
- Strengths-based solutions focus

Partnership

- Joint vision at management level
- Joint initiation and planning of programme
- Joint development of programme processes
- Joint development and use of the assessment tools

Networks

- Within HNZC examples
    - Sharing RENTEL information
    - Working with Acquisitions team and SPU

    - Working with Neighbourhood Units and Regional Placement Officers.
- Within Health examples
    - Working with secondary care services, e.g. hospital based clinics
    - Working with primary care providers, e.g. GPs, screening services, community-based clinics, educators and Plunket
- External examples
    - Governmental
        - Development and use of key contacts at Work and Income
        - Education facilities
        - City Council
        - Accident Compensation Corporation (ACC)
    - Non governmental
        - Budgeting
        - Support – food parcels
        - Community exercise classes

5.5 What are the successful outcomes?

A number of overall outcomes have been identified by both participants and providers alike. It appears that the outcomes can be identified for households as well as the 'system' and the providers. System in this setting refers to the management structures of the various agencies involved in the HHP. The following table highlights outcomes for the household which fall into categories of health and wellbeing, as well as daily functioning. For the providers the dimensions relate to increased awareness, enhanced job satisfaction, and professional expertise. Finally system changes relating to effective collaboration and developing partnerships is an indication of success.

Table 15: Summary of successful outcomes.

Households	Systems	Providers
• Increased wellbeing • Improved health • Reduced sickness • Increased feeling of comfort • Positive attitude towards life • Sense of empowerment • Increased happiness • Improved family functioning • Improved family connectedness • Increased sense of pride • Greater sense of home • Increased social and community participation • Increased accident and injury prevention • Increased day to day functioning	• Increased effectiveness and efficiency • Increase networks and partnership • More collaborative	• Increased staff awareness • Increased cultural awareness • Advocacy and education role has developed • Philosophical change • Attitude change • Increased job satisfaction • Increased professional expertise and knowledge

5.6 What works?

The providers' and participants' interviews suggest that there are a number of reasons for programme? success. Reasons for this success can be considered from the perspectives of the system and of the staff.

First, the system that has been developed has a number of collaborative networks, and strong strategic partnerships. These partnerships have clear guidelines and strong structures in place, and are ready for a move towards sustainability. The system is responsive to the needs of the community and at the same time (in some cases), empowers communities by involving people in some decision making.

Second, providers within the system have the necessary professional skill mix. They are responsive when it comes to the needs of the community, and their role encompasses one of educator and advocate. Providers' attitudes are appropriate to the context and are culturally informed. Most importantly, providers possess a high level of expertise. Involvement of the families in the houses provides a useful practical link for support and assessment. The Joint Assessment alone allows for an opportunity to educate and provide support where necessary (e.g. connecting with GP's). The standard of housing stock has risen as a consequence of the programme, and in some cases support of the disabled community has occurred.

5.7 Obstacles to successful outcomes

Providers and participants alike saw few obstacles to the achievement of successful outcomes. However, identifying potential obstacles is seen as essential feedback to enhance programme development. HHP providers identified some potential obstacles to achieving programme sustainability. These are summarised in a number of areas. The need for continued movement towards sustainability was seen as most significant. To achieve sustainability, it is important that the programme becomes more integrated into the state system. To achieve this, the programme needs to have a fully articulated plan for movement towards such a policy. Continuation of its status as an "innovation" is a threat to sustainability. The programme needs to promote innovative solutions, rather than be "an innovation".

The programme needs to solidify the networks that have been created as a means of risk management. This movement from a network to an articulated system (this is a movement from informal to formal relationships and ways of working), also needs to include an extension of collaboration with other groups, such as those 'auxiliary' to the project (e.g. Work and Income). Joint Assessments are of high quality and need to continue to be referred for specialist input, such as OTs, who in turn can undertake disability assessments, and refer on for appropriate care within community health services. OTs can also assist in the decision about interventions needed for housing modifications.

Resources are also seen as an obstacle. First, human resources are stretched to the limit (neighbour hood unit workloads). While providers are committed and attrition in the health area is small, the network is at risk with such high pressure (Occupational therapist availability to work on both the HHP and regular workloads). Finances are a further

resource risk: sustainable programmes cannot grow and adapt with the continued threat or loss of funding. It is interesting to note that finances for participants were also a concern for many families. The move to a larger house brings more utility type expenses, and often increased rent. While many managed this change, for some it was a concern. Re-crowding within the houses was seen as a concern by all. Providers saw re-crowding as an issue that needed to be planned for and followed-up. Many tenants felt pressure from their extended family to re-crowd and some used their participation in the HHP as an explanation to family members for not increasing the number of people in their house.

The families and providers saw the grounds as a concern. For the clients, a sense of home was the most significant element of success but often this sense of home did not include the grounds. They were often unkempt and muddy, thus for some, detracting from the notion of pride in a home.

The providers and families believed that it was imperative that the families must be involved in the decision making process about their home. It is this involvement that adds to the sense of empowerment and thus the overall impact of the programme.

5.8 Pathway to success

The pathway to success diagram represents a model of reflection on the programme from the participants' and the providers' perspectives. Comparison of the flow diagram with the programme logic allows us to understand the progress of the HHP.

While there are significant questions within the HHP that are unanswered the model can not be fully validated. However, comparison of the pathway to success model with the programme logic illustrates that the programme is well on track to achieving its outcomes. There are several components that are missing in the pathway to success model. For example the participants rarely discuss access to health care or social services. Neither do the families discuss reduced rates in meningococcal disease. It is hard to understand the relationship between the programme and increased knowledge. The families do talk about the benefits of reduced overcrowding and a better quality of housing affect on them generally. Perhaps it is reasonable to infer that the households' view of success is different from the providers. Understanding the saliency of variables relating to health and housing is an issue for further enquiry.

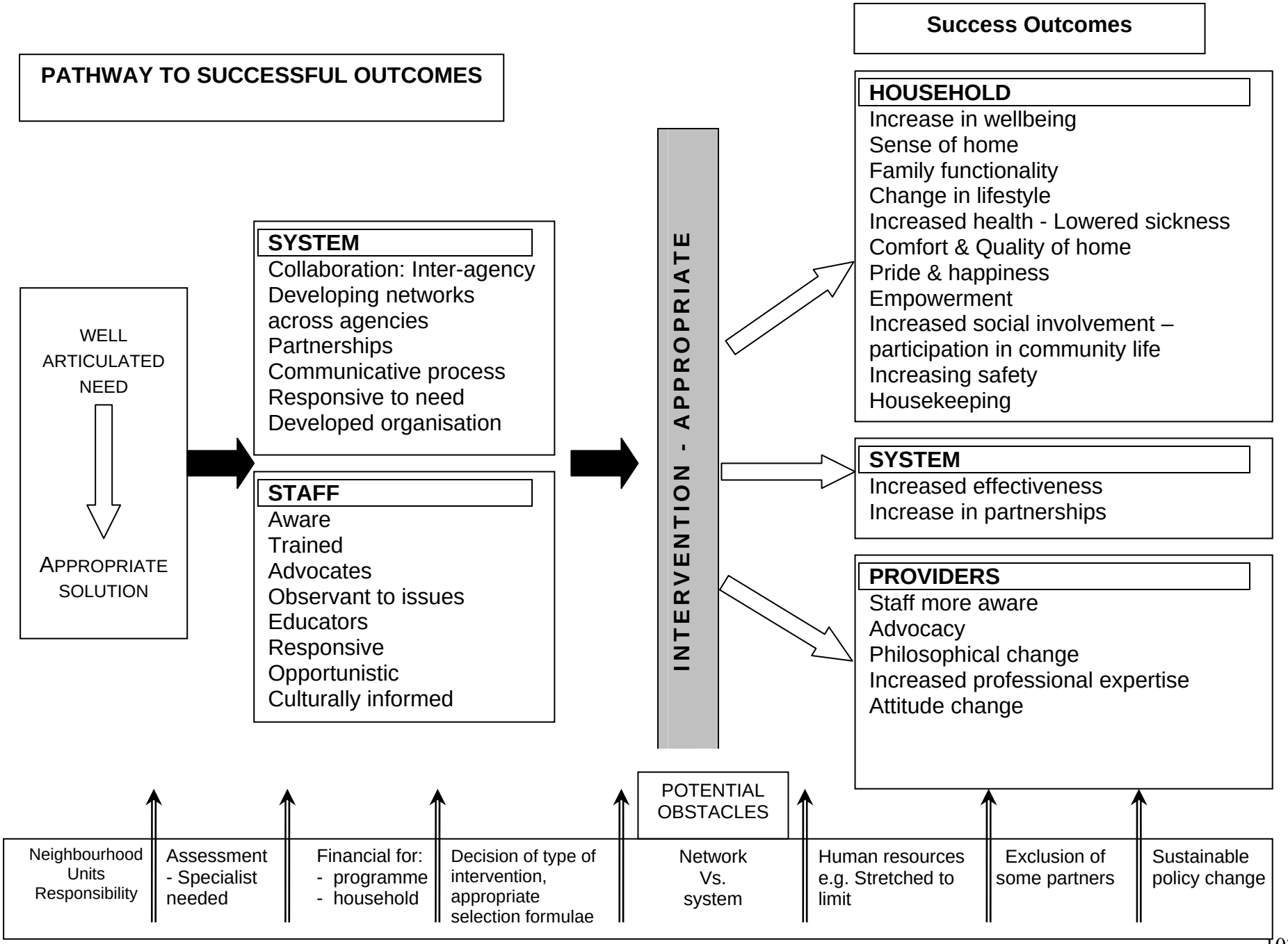
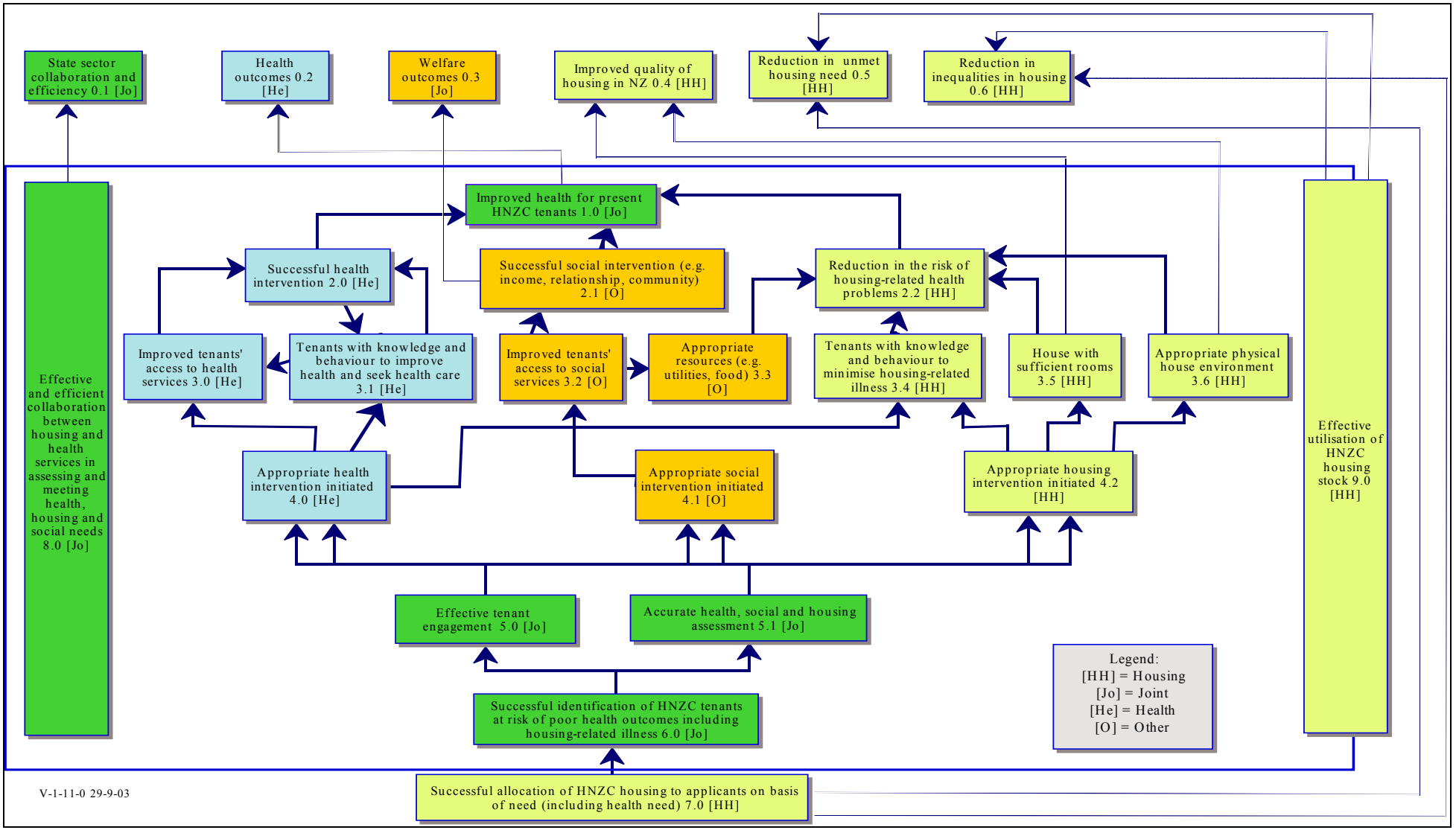


Figure 2: Pathway to success in the HHP


State sector collaboration and efficiency 0.1 [Jo]
Health outcomes 0.2 [He]
Welfare outcomes 0.3 [Jo]
Improved quality of housing in NZ 0.4 [HH]
Reduction in unmet housing need 0.5 [HH]
Reduction in inequalities in housing 0.6 [HH]
Effective and efficient collaboration between housing and health services in assessing and meeting health, housing and social needs 8.0 [Jo]
Improved health for present HNZC tenants 1.0 [Jo]
Successful health intervention 2.0 [He]
Successful social intervention (e.g. income, relationship, community) 2.1 [O]
Reduction in the risk of housing-related health problems 2.2 [HH]
Improved tenants' access to health services 3.0 [He]
Tenants with knowledge and behaviour to improve health and seek health care 3.1 [He]
Improved tenants' access to social services 3.2 [O]
Appropriate resources (e.g. utilities, food) 3.3 [O]
Tenants with knowledge and behaviour to minimise housing-related illness 3.4 [HH]
House with sufficient rooms 3.5 [HH]
Appropriate physical house environment 3.6 [HH]
Effective utilisation of HNZC housing stock 9.0 [HH]
Appropriate health intervention initiated 4.0 [He]
Appropriate social intervention initiated 4.1 [O]
Appropriate housing intervention initiated 4.2 [HH]
Effective tenant engagement 5.0 [Jo]
Accurate health, social and housing assessment 5.1 [Jo]
Legend:
[HH] = Housing
[Jo] = Joint
[He] = Health
[O] = Other
Successful identification of HNZC tenants at risk of poor health outcomes including housing-related illness 6.0 [Jo]
V-1-11-0 29-9-03
Successful allocation of HNZC housing to applicants on basis of need (including health need) 7.0 [HH]

5.9 Programme objectives: Crosswalk

It is important to revisit the Evaluation Crosswalk and consider the status of the evaluation questions and whether the programme objectives have been met. Based on the evidence provided, the evaluation team has addressed each evaluation question and determined whether the programme objectives have been met. The Evaluation Crosswalk is presented below, providing a summary of the evaluation questions, the programme objectives, and references to the programme logic.

The evaluation questions addressed below are:

1. How does the state sector collaboration and efficiency impact on expected outcomes?
2. Which variables facilitated expected improvements in health and wellbeing of households?
3. Which variables facilitated:
    - An expected reduction of unmet housing needs?
    - An improvement quality of housing?
    - A reduction in inequality in housing?
4. How sustainable is the HHP?

Summary of crosswalk questions

Table 16: Summary of crosswalk questions

Evaluation Questions	Programme Logic Ref	Response	Objectives Met Partially Met Needs Attention Unclear
1. How does the state sector collaboration and efficiency impact on expected outcomes?			
What was the level of communication between agencies involved in HHP programme?	8.01	Very high amongst HNZC and DHBs. Some auxiliary members not as involved.	Met
What was the nature of the communication between various service providers and with their clients in considering decisions about house allocation?	8.01	This was more often than not a network rather than an articulated system. The Joint Assessment is a very useful tool for facilitating communication. Some specialist groups wanted more input. Clients generally very positive about their input. Some listened to, however not adhered to.	Met
How do the various parties regard their experience as participants in HHP intervention; particularly the fairness and transparency of decision making?	8.01	Providers felt the process was very collaborative and empowering for all involved. Clients felt that the system was overall good and fair yet they were not always in control of what they received.	Met
Has there been effective and efficient collaboration between the joint agencies to assess and meet the social and health needs of the occupants?	8.01	Generally, very effective and very quick to get the decision in the pipeline. There is, however, some thought that action to finalize was often slower. Matters of urgency dealt with very promptly and effectively.	Met
How effectively did HNZC engage with the tenant?	5.0	Generally felt that the clients were engaged from a health and housing perspective, some clients totally engaged yet, a small proportion felt they were still not in control.	Met
2. What variables facilitated expected improvements in health and wellbeing of households?			
What is the reduction in the risk of housing-related health conditions, diseases and injuries?	2.2	Perception of considerable changes from the provider and the participant relating to safety inside, stress related factors and respiratory problems. Chronic health concerns much more manageable.	Met
Is there an increase in the knowledge and behaviours that will minimize housing-related illness?	1.0	Some sense of change, however evidence unclear.	Unclear
Is there improved health for present HNZC tenants?		A perception of improved health physically and psychologically among many tenants.	Partially Met Unclear
What are the improvements in self- assessed wellbeing?	0.3	Clients and participants perceive a change in comfort, functionality, pride and happiness.	Met
Does the household have, or have access to the knowledge, skills and resources to maintain a healthy living environment in the house?	3.4	Unclear. Some evidence of knowledge and skill, e.g. change in tidiness and cleanliness following HHP intervention; people happy to do housework. But also, people uncertain about how to do this, and HHP addressing this with information pack, MAP and follow-up using CHWs.	Unclear
What is left behind that helps tenants to maintain the environment?	Outcomes Framework	Unclear. Better access to Work and Income and other government systems. Sense of empowerment, stronger family relationships and relationships to church, and therefore stronger support networks.	Unclear Partially Met
How have the interventions influenced household functioning in regard to: • privacy needs;	0.3	The increased space, privacy, reduced overcrowding and increased family cohesion appears to be related to more functionality and connectedness within the community, e.g. church. Families feel safer in their homes, however in some instances not outside (applies to both adult and child safety).	Met, More information required for some

Evaluation Questions	Programme Logic Ref	Response	Objectives Met Partially Met Needs Attention Unclear
• play, safety of small children; • participation in community groups; • school attendance, homework; and • interaction with their social network?			aspects
How have the interventions affected household participation in community and society such as: • neighbourhood; • ethnic; • religious; • school; • community; • sports groups,; • employment and, • education, etc.?	0.3	More participation in some communities, e.g. churches. A tendency to feel a greater sense of belonging, yet this is still somewhat unclear in the evidence.	Met
How accurate are the Joint Assessments?	5.1	Overall very much on target, however, for future consideration, some of the more complex issues should be fully assessed, e.g. disabilities.	Met Partially Met
How appropriate were the housing intervention(s)?	4.2	Very well matched, and the more complex situations are still providing a challenge. Determining the weighting of household needs and appropriate action is difficult.	Met
How appropriate were the health/social intervention(s)?	4.0-4.1	Needs and actions seems well matched and solutions quickly orchestrated.	Met
3. Which variables facilitated: ▪ **An expected reduction of unmet housing needs?** ▪ **An improvement in the quality of housing?** ▪ **A reduction in inequality in housing?**			
What changes have been made in housing stock?	9.0	Not answered, evidence will come from RENTEL analysis.	Unclear
Are the changes made to housing stock appropriate for the needs of the household (i.e. according to financial, generational, social and cultural needs) within the constraints of HNZC specifications?	3.6	Not answered, evidence not collected.	Unclear
What interventions occurred?	3.6	There were several levels of intervention conducted with various combinations of health, social and housing.	Met
How satisfied was the household with these interventions?	4.2 3.6	Overall the households were extremely satisfied with the interventions. Some families still have issues to be resolved.	Met
Is the changed physical makeup of the house and grounds appropriate for the house composition?	4.2 3.6	Physical changes in the house were seen to have been very appropriate in most cases. There are still concerns with the grounds.	Met Needs Attention
What is the meaning of this home (house and grounds) to the householders in the context of	Outcomes Framework	The change in housing environment has created a sense of place, of safety, of pride, comfort and happiness in their home. The lack of change in the grounds in seen as a threat to their pride and safety.	Met Needs Attention

Evaluation Questions	Programme Logic Ref	Response	Objectives Met Partially Met Needs Attention Unclear
their past experiences, current and anticipated future needs?			
What are the levels of comfort in the house such as temperature, noise, space, air quality (presence of dust, mould, provision for air movement)?	3.5 3.6	No expert opinion collected, however the increased sense of comfort created is seen as attributable to a cleaner environment, more space, reduced noise and sometimes improved temperature (still an issue for some households).	Met Partially Met
Have overcrowding issues been resolved in a way that is acceptable to the householders?	3.5	Overcrowding issues appear to have been resolved; families seem to have a better awareness of problems of overcrowding.	Met
Has housework altered significantly since the intervention (consider change in crowding, cleanliness of new additions, increase in space, house pride)?	3.5	The householders describe an increase in housework associated with pride in the house, and ease of cleaning increased with new surfaces and space.	Met
Has there been a change in rent/arrears/ability to pay rent/damage to home since the intervention?	2.1	Some discussion from households around change to rental cost.	More information required
How successful is the allocation of HNZC housing to applicants on basis of need?	9.0	Overall the provider's perception is one of successful allocation on the basis of need.	More information required
Has there been effective use of HNZC housing stock?	9.0	Comment will be possible once the RENTEL analysis has been incorporated, and when the second year of the outcomes evaluations is completed.	Unclear
4. How sustainable is the HHP?			
Does the intervention comply with Social Allocation System?	Outcomes Framework	Unclear. Evidence may come from RENTEL analysis.	Unclear
What are the limitations on sustaining the results of the interventions?	Outcomes Framework	The programme has a high probability of sustainability. Attention is needed in developing a clearly articulated organisational system. The providers need to move from a network to an organizational structure. Movement towards establishment of strategic policy framework as a basis for future development needs to begin.	Met Needs Attention
What are the resources that will support the household in sustaining positive results?	Outcomes Framework	A number of resources are required for sustainability. Funding and human resources are the most critical.	Partially Met Needs Attention
What were the unexpected and unintended outcomes and consequences?	Outcomes Framework	Changes in the philosophy for many contract workers and increased job satisfaction.	Met

5.10 Considerations for 'enhancing outcomes' in the HHP

Along with promoting the successful outcomes that have come about due to an intervention, outcomes evaluation looks at ways to improve and build on the quality of programme delivery for participants. In collecting stories from tenants who participated in the HHP, some areas were highlighted where outcomes could be further enhanced.

The following section outlines these areas, and is based on household interview data and literature around Health Impact Assessment criteria. Care has been taken to acknowledge the constraints of the HHP in its ability to act upon all suggestions, and indeed the aim is to provide some points for discussion, rather than fault the programme. In addition, a number of the obstacles to success identified by households are not the responsibility of HHP.

Health Impact Assessment checklist:

- What are the specific housing changes/improvements that are proposed?
- Are there other housing changes not detailed in the proposals that may occur?
- What is the evidence that these changes will affect health and any specific symptoms?
- Are there vulnerable groups (e.g. elderly, asthmatic people) who may benefit particularly from the proposed changes?
- When can health gains be realistically expected?
- Will the improvement be too marginal to detect?
- Are there going to be changes in housing costs?
- Is there any other change that may affect living costs – transport, food, access to amenities?
- Was there sufficient consultation about the housing improvements?
- What is residents' baseline satisfaction level with their housing?
- What levels of displacement can be predicted over the period of improvement?
- What explanations might there be for displacement?

(Thomson et al., 2003)

Outline of possible areas and implications to consider before proceeding with HHP interventions:

Structural housing effects:	**Example**
Minimise disruption – Have all efforts been made to minimise disruption to the household in the instance of structural change? Has the household been fully briefed on exactly what will happen in the household? Has the rationale for housing interventions been explained to the household?	Instances where measurements for carpet/garage have been made, only to be withdrawn later. Households where carpet has not been laid for reasons of allergen reduction, asthma, etc., should be explained to residents.

Financial effects:	**Example**
Possible increase in expenses - Are there going to be changes (actual and potential) in housing costs? Consider rent, utilities. If yes, have these been discussed with the household? Do they agree to the changes? Have tenants been informed of ways to improve energy efficiency in their home? Appropriateness of certain installations considering household situation. Are there going to be other financial effects? Consider access/transport costs, ability to get to work, etc.	 Reducing the temperature of hot water cylinders, turning off lights in empty rooms, effective heating options. Installing heaters through household, when prevailing conduct means residents don't use them because of electricity cost.

Social effects:	**Example**
Household location - Will the intervention mean a change in location for the household? If yes, has this been discussed with the household? Have the possible effects been explained? Have tenants' wishes been considered regarding connection to property – gardens, etc.?	Consider proximity to family, friends, support network, neighbourhood characteristics, i.e. safety for vulnerable members of household, crime.

Practical effects:	**Example**
Are changes to kitchen/bathroom apparatus appropriate for household members? (Particularly those with OT issues).	Shower tap/mixer installed at level of shower head, tenant can't reach due to mobility problems; any difference in cost/installation if mixer placed at lower height?

Health/injury prevention:	**Example**
If additional structures (e.g. decking), has injury prevention been considered?	Outdoor stairs should have non-slip surface, railing.

6 EVALUATION METHODOLOGY

In this section we outline our approach to the outcomes evaluation, the methodology underpinning the evaluation and describe the methods used to collect data.

6.1 Background

Housing improvement has been identified as a setting for health intervention to reduce housing-related health problems, and for health and social intervention to achieve greater wellbeing and increased social participation (Howden-Chapman & Carroll, 2004). The HHP seeks to achieve outcomes outlined in the HHP Programme Logic through improvement of the housing stock and better integration of housing, health and social services. The expected outcomes as re-defined by HNZC for the purposes of this evaluation (HNZC, 2004a) are:

- A reduction in the risk of housing related diseases, conditions and injuries; and
- Improvements in self assessed wellbeing as a result of participation in Healthy Housing.

This evaluation is specifically focussed on housing, although it necessarily and importantly includes health and welfare processes and outcomes. Further, responsiveness to diversity is a key theme given the range of cultural backgrounds, and composition types of the households participating in HHP. As the nature of the intervention and number of stakeholders involved in the HHP is complex (within predetermined constraints), so is the nature of the evaluation. Consequently, the methodology for the evaluation is built on a number of foundations.

The objective of the outcomes evaluation component of this overall evaluation is to address the question: "What is the evidence that the HHP has made a difference to the risk and rate of housing related diseases, conditions and injuries and improved wellbeing and comfort, family functioning and increased social participation?" (HNZC, 2004b).

The three foundations on which the evaluation is built are: the match between the philosophy and culture of the programme; the use of Success Case Methodology (SCM); and the use of the Evaluation Crosswalk.

First, the evaluation should match the philosophy and culture of the programme. The HHP uses a strengths-based, solution-focused approach (De Shazer, 1985; Saleeby, 1997). The characteristics of this approach are starting with household situations as they are, using storytelling to work out what interventions are appropriate, working collaboratively to access resources, empowering families to take as much responsibility as possible, and working out what success looks like and working towards this. This means that the evaluation approach is collaborative. The evaluation questions, selection criteria for households to be studied in-depth, and the appropriate data collection methods have

been developed collaboratively with providers. The outcome evaluation team has paid particular attention to the development of a cost-benefit feasibility study that has been conducted in tandem with this evaluation by a team from the Wellington School of Medicine.

Second, the evaluation makes use of an adapted form of SCM (Brinkerhoff, 2003), an innovative and parsimonious approach to evaluation that combines storytelling with contemporary evaluation approaches used in traditional case study methodology. SCM is a relatively quick but powerful method to ascertain and understand what is working and what is not. There are two major phases in SCM: locating likely success cases, and then determining and documenting these successes. The SCM has four basic components: developing a model of success; using that model to develop a survey to identify success; conducting in-depth studies of the identified success cases; and reporting and analyzing all the findings (Brinkerhoff, 2003).

A model of success for determining 'what success would look like' for HHP is derived from existing documentation and the literature. Several reports relating to the HHP and existing research literature have been synthesized, and a 'programme logic' developed by the HHP providers (see page 20) has provided guidance for the intervention and outcomes (HNZC, 2004b). As detailed in the Request for Proposal, 20 households have been selected on criteria that encompass various types of intervention, as well as on the perception of success based on input from case workers and other providers. The success cases have been identified by the providers using available database information and other reported information, by the time in the HHP, and the 'programme logic'. All selected providers and the evaluation team have been actively involved in the selection of the households.

Third, because of the complexity and collaborative nature of this evaluation, it is important to use a tool to clearly illustrate the structure of the evaluation, the nature of the evaluation questions, and the method for securing evidence relating to the questions. Thus the evaluation structure is presented as an "Evaluation Crosswalk" (O'Sullivan, 1997). This Crosswalk indicates proposed data sources for addressing each evaluation question. Evaluation questions have already been developed directly from the programme logic and multiple data sources will be used to triangulate the data gathering. These evaluation questions may need to be revised and refined as the evaluation progresses.

6.2 Methods of data collection

The methods used to obtain information from the households and HHP providers need to be robust and culturally appropriate. The SCM allows for an in-depth approach to the collection of the households stories, and is considered to be the best way in which to evaluate both short and intermediate term outcomes and their relationship to outputs by employing data from multiple cases (McKenzie, Searle, & Park, 2004). Data from the outcomes evaluation can be used to identify possible mechanisms for both positive and negative impacts as well as to inform changes to the intervention (Thomson et al., 2003).

6.2.1 Provider interviews and/or focus groups

Semi-structured interviews and/or focus groups were undertaken with all HHP service providers. The interview schedule (see Appendix A) included questions about HHP roles, processes, inter-sectoral collaboration, obstacles, success stories, goals and achievements.

Semi-structured interviews, of approximately 90 minutes duration each, were undertaken in quiet private offices within the usual work environment of:

- The four PHNs (two each from Counties Manukau and Auckland DHBs) as well as the HHP Community Health Worker working with the PHNs in Manukau;
- The four HHP ACs, as well as the HHP Solution's Coordinator and Project Coordinator;
- All three Project Managers involved from HNZC, ADHB and CMDHB;
- The PHN Service Manager for CMDHB; and
- A contract manager and contract supervisor from HNZC.

Most of the interviews were face to face. CMDHB chose to be interviewed initially in a focus group followed by face-to-face interviews. The interviewer took notes during the provider interviews, which were also taped to aid interviewer recall through transcription. These transcriptions were checked for accuracy against the tapes and verifying details again with providers if required.

6.2.2 Case study household interviews

Fifteen households from each of two suburbs (Wiri and Otara) were selected using the HHP database and PHN records[11]. Most of the households were selected to reflect the varying degree of housing intervention(s) carried out by the HHP, along with the level of health need as determined by the visiting PHN. In addition, three households were selected because of their significance to the ACs and PHNs and used as benchmarks.

Potential participant households were contacted by the HHP team, who explained the evaluation research and procedure. Verbal consent to have interviewers call was obtained, along with an indication of suitable times to visit. Interview staff from the evaluation team made contact with households by phone, and arranged the first interview. A generous time allowance was made in the first interview for explanation of the interview and research, with discussion of the Participant Information Sheet and written consent procedure. The interview did not proceed until written consent was obtained, and this included consent to tape-record the interview for later transcription.

The three interviews with each household will provide the basis for moderate depth in the description of "the experiences of people's lives and the social contexts that

[11] The analysis of twenty of the thirty households is included in this report as a result of time constraints. The remaining households will be included in subsequent reports.

strengthen, support or diminish health." An overview of the content of the three interview visits is contained in Appendix B.

The semi-structured interviews of 45 minutes to 1 hour were carried out with participating households, using trained interviewers selected for their experience and cultural knowledge to develop relationships with differing ethnicities. These interviews revealed both lived experience and empirical information that has been compared and contrasted between the case studies (Bernard, 2002). The interviewers' observations of housekeeping, house usage, and responses to the interventions were also reported on each of the three visits, and these set the context for the subsequent analysis of interview data. More than one interview was necessary to enable interviewers to build up a rapport with household members, a vital factor in gathering sufficient depth and discussion during the interview. A semi-structured interview process ensured key questions were addressed in the discussion, while allowing for reflection and elaboration by household members. These captured a range of participant experiences, expectations, values and behaviours in a meaningful and appropriate way, while allowing for unforeseen issues and themes to be included. It also means that the data collected is at once comparable (through the use of common themes and questions) but also fluid enough to capture unique experiences.

6.2.3 Database information

Demographic and intervention data held by HHP will provide further detail on the housing and social changes that have occurred in participating households. These data will be analysed by HNZC and the evaluation team will access the reports where necessary. At the time of writing this report, these data were not yet to hand[12].

6.3 Analysis

The provider interview data has been analysed using the general inductive method with the aid of NVivo software for qualitative data analysis (QSR International, 1999-2002). Key themes have been summarised, and stories from the providers captured to retain the depth of meaning for the interviewee. The results of this part of the analysis are presented in Chapter 6 of this report.

A similar approach to the household interviews allowed findings to emerge through common and significant themes identified from interview data (Thomas, 2003). Analysis was led both by research questions and by additional themes that arose in the interview content. Categories were developed to summarise key themes, allowing for variation between household case studies. The case study data was analysed using four different reference points:

1. Level of intervention, from minimal housing and minimal health need to maximum housing intervention and health need;
2. Year of intervention;

[12] The reports on HNZC RENTEL data could not be undertaken until all thirty households participating in the Outcomes Evaluation had been identified.

3. Location by suburb where HHP operated; and
4. Three benchmarked households, identified as being a household with a 'significant' experience in HHP.

These are further explained in Section 3.3.

6.4 Ethical considerations

When conducting any kind of research, especially research involving human participants, it is crucial to ensure that the research project is carried out in such a way as to ensure the safety and wellbeing of all of those involved and to ensure participants can give freely derived informed consent.

This research involves, among others, people who are tenants of HNZC. Although tenants have agreed to be involved in housing research in general terms, it was particularly important, given the power imbalance in a landlord-tenant relationship, that an independent ethics committee review this case study evaluation. Those invited to participate need to be made fully aware that their consent to take part in this particular research is voluntary and will not affect their tenancy, nor will they be identifiable in any report. Ethical approval for this study and corresponding documentation (Participant Information Sheets and Consent forms) was therefore sought, and has been granted by the Northern X Regional Ethics Committee. The approved documentation is included in Appendix B of this report.

7 DEVELOPMENT OF EVALUATION FRAMEWORK AND PROCESSES

In this section we present the 'Crosswalk' framework and outline the process by which household selection took place. We also outline the approach taken through which comparisons between selected households will be made.

7.1 Validation of Crosswalk

The evaluation 'Crosswalk' presents the source of information for each evaluation question, and provides an outline of possible data collection methods within the case studies. The evaluation questions have been revised and refined in conjunction with the HNZC's HHP Manager, the Research and Evaluation Team's Senior Research and Evaluation Analyst managing the evaluation, and the CMDHB's Healthy Housing Coordinator.

Each evaluation question has been linked to a reference point on the programme logic (Figure 1, page 20).

Table 17: Validation of crosswalk.

Evaluation Crosswalk	Programme Logic ref.	Provider HH; J;O; HE	Survey	Household Interviews	Focus group	Documentary analysis	Database: RENTEL	Database: Other
1. How does the state sector collaboration and efficiency impact on expected outcomes?								
a) What was the level of communication between agencies involved in HH programme?	8.01	J	**X**		**X**	**X**		
b) What was the nature of the communication between various service providers and with their clients in considering decisions about house allocation?	8.01	J	**X**	**X**	**X**			
c) How do the various parties regard their experience as participants in the HHP intervention; particularly the fairness and transparency of decision making?	8.01	J		**X**	**X**			
d) Has there been effective and efficient collaboration between the joint agencies to assess and meet the social and health needs of the occupants?	8.01	J	**X**	**X**	**X**			

Evaluation Crosswalk	Programme Logic ref.	Provider HH; J;O; HE	Survey	Household Interviews	Focus group	Documentary analysis	Database: RENTEL	Database: Other
e) How effectively did HNZC engage with the tenant?	5.0	J		**X**	**X**			
2. What variables facilitated expected improvements in health and wellbeing of households?								
a) What is the reduction in the risk of housing-related health conditions, diseases and injuries?	2.2	HH						**X**
b) Is there an increase in the knowledge and behaviours that will minimize housing-related illness?	1.0	J		**X**				**X**
c) Is there improved health for present HNZC tenants?		J	**X**	**X**			**X**	
d) What are the improvements in self assessed wellbeing?	0.3		**X**	**X**	**X**			**X**
e) Does the household have, or have access to the knowledge, skills and resources to maintain a healthy living environment in the house?	3.4	HH		**X**	**X**			
f) What is left behind that helps tenants to maintain the environment?	Out-comes Frame-work			**X**	**X**			
g) How have the interventions influenced household functioning in regard to: • privacy needs, • play, safety of small children, • participation in community groups, • school attendance, homework, and • interaction with their social network?	0.3	Joint		**X**	**X**			
h) How have the interventions affected household participation in community and society such as: • neighbourhood, • ethnic, religious, • school, community, sports groups, • employment and education, etc.?	0.3	Joint		**X**	**X**			
i) How accurate are the Joint Assessments?	5.1	J	**X**	**X**	**X**			**X**
j) How appropriate were the housing	4.2	HH	**X**	**X**		**X**		**X**

Evaluation Crosswalk	Programme Logic ref.	Provider HH; J;O; HE	Survey	Household Interviews	Focus group	Documentary analysis	Database: RENTEL	Database: Other
intervention(s)?								
k) How appropriate were the health/social intervention(s)?	4.0-4.1	HE		**X**	**X**			**X**
3. Which variables facilitated: ▪ **An expected reduction of unmet housing needs?** ▪ **An improvement in the quality of housing?** ▪ **A reduction in the inequality of housing?**								
a) What changes have been made in housing stock?	9.0	HH				**X**	**X**	
b) Are the changes made to housing stock appropriate for the needs of the household (i.e. according to financial, generational, social and cultural needs) within the constraints of HNZC specifications?	3.6	HH					**X**	
c) What interventions occurred?	3.6	HH					**X**	
d) How satisfied was the household with these interventions?	4.2 3.6	HH		**X**			**X**	
e) Is the changed physical makeup of the house and grounds appropriate for the house composition?	4.2 3.6	HH		**X**			**X**	
f) What is the meaning of this home (house and grounds) to the householders in the context of their past experiences, current and anticipated future needs?	Out-comes Frame-work	HH		**X**			**X**	
g) What are the levels of comfort in the house such as temperature, noise, space, air quality (presence of dust, mould, provision for air movement)?	3.5 3.6	HH		**X**			**X**	
h) Have overcrowding issues been resolved in a way that is acceptable to the householders?	3.5	HH		**X**				
i) Has housework altered significantly since the intervention (consider change in crowding, cleanliness of new additions, increase in space, house pride)?	3.5	HH		**X**				
j) Has there been a change in rent/arrears/ability to pay rent/damage to home since the intervention?	2.1	O		**X**		**X**		**X**
k) How successful is the allocation of HNZC	9.0	HH			**X**	**X**	**X**	**X**

Evaluation Crosswalk	Programme Logic ref.	Provider HH; J;O; HE	Survey	Household Interviews	Focus group	Documentary analysis	Database: RENTEL	Database: Other
housing to applicants on basis of need?								
l) Has there been effective use of HNZC housing stock?	9.0	HH		**X**	**X**			
4. How sustainable is the Healthy Housing Programme?								
a) Does the intervention comply with Social Allocation System?	Out-comes Frame-work	HH					**X**	
b) What are the limitations on sustaining the results of the interventions?	Out-comes Frame-work	J			**X**			
c) What are the resources that will support the household in sustaining positive results?	Out-comes Frame-work	J			**X**			
d) What were the unexpected and unintended outcomes and consequences?	Out-comes Frame-work	J		**X**	**X**			

7.2 Process for selection of households

The service specifications for the outcomes evaluation stipulated that 30 households would be selected to participate in interviews. As such, the evaluation is based on telling the stories of 30 households, capturing the effect that the HHP has had on their wellbeing and day-to-day life.

The information held by the HHP on households they work with is highly sensitive, containing reference to health concerns and social issues for individuals in the home. To maintain security of this information, the HHP team managed a large part of the selection process, with input and guidance from the evaluation team around selection criteria. The evaluation team attended the final selection meeting as non-participant observers, and were able to witness the process and issues pertaining to selection.

Some of the considerations that arose in this discussion included:

- The difficulty in defining the exact nature of an 'intervention';

- The fact that no households receive only housing, or only health interventions. While some may be minimal, all homes receive basic insulation/heating/ventilation measures at least, and some form of support for their wellbeing (be it advice, or a direct referral); and
- The large amount of data collected through the Joint Assessment that it is not always possible to capture in the database.

In order to ensure a diverse sample for HHP interventions, a set of selection criteria were developed by both the evaluation team, and HNZC. These were based on a range of factors, most importantly:

- Geographical location of the household;
- Level of housing intervention undertaken, and level of health need observed in household;
- Length of time since involvement in the HHP; and
- Significance of household experience, as judged by the HHP team.

Information to assist with selecting the households based on these criteria came from the HHP database for housing intervention, and the records of the HHP PHNs who visited the homes to assess the level of health need. The two sets of information were then discussed, and a combination of households decided upon. No households involved in the HHP receive solely housing, or solely health interventions – both are implemented to some degree in every household.

7.3 Levels of comparison

Four levels of comparison could be analysed within the sample of 30 households: geographical location; level of housing intervention and level of health need in the household; length of time since involvement in HHP; and comparison with three 'benchmarch' households, classified as 'positive experience', 'negative experience', and 'complex experience'.

7.3.1 Geographical location

Fifteen households from each of two suburbs involved in the HHP have been pre-selected by HHP providers to be interviewed. A small number of stand-by households were also included in the list, to account for households who were unwilling to be interviewed, or could not be contacted. In analysing the results of the qualitative interviews with the households, assessment will be made to establish if there are any marked contrasts between the experiences in the two suburbs.

7.3.2 Level of housing intervention and level of health need in household

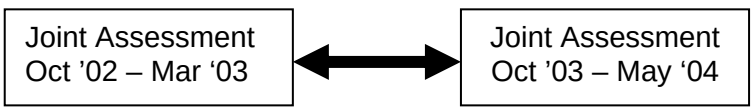
Within each group of 15 households, 12 were selected based on a scale from minimal housing intervention and low health need, to maximum housing intervention and high health need. Analysis of the information gathered through interviews will provide insight into whether an extensive housing intervention has the most effect on a household, for example.

Table 18: Example of combination of housing intervention and health need for household selection.

Household number	Level of housing intervention	Level of health need
1	Insulation, ventilation	Minimal
2	Insulation, ventilation	Respiratory
3	Insulation, ventilation	Significant health and/or social issues
4	Generic modernisation	Significant health and/or social issues
5	Specific modification	Disability
6	Extension	Crowding only
7	Extension	Crowding plus minor health and/or social issues
8	Extension	Crowding plus significant health and/or social issues
9	Extension	High and complex needs
10	Part household transfer	Crowding only
11	Part household transfer	Crowding plus significant health and/or social issues
12	Household transfer	Crowding only

7.3.3 Length of time since involvement in HHP

An important consideration in comparing the experience of households involved in the HHP revolves around the time the intervention took place in their community. The PHN team acknowledged the important fact that their practice would have changed over the three years since the intervention began. All providers involved in the intervention would have improved their knowledge and skills significantly from one year to the next, and this may have influenced the effect of the intervention on the household. To this end, the year that the household participated in the HHP will be taken into account during the analysis. The time of participation in the HHP will be determined by the date of the Joint Assessment, as indicated by the HHP team.



7.3.4 Comparison with three 'benchmark' households, classified as 'positive experience', 'negative experience', and 'complex experience'

The underlying methodology for this outcomes evaluation is based around determining 'what success looks like' in the HHP. As such, it was decided by the evaluation and programme teams that three households from each suburb would be selected as 'benchmark' experiences. The criteria for these particular cases came from the experience of the ACs and PHNs involved with the households, who considered the three to be examples of 'positive', 'negative' and 'complex' experiences. The stories that emerge from these households will be compared against each other, and with the remaining twelve households to gauge any findings that may inform our understanding of success in the HHP.

8 DISCUSSION

8.1 The HHP: a broadened vision

Historically, housing policy in New Zealand has focussed on the provision and maintenance of housing units themselves, rather than associated welfare issues (Ferguson, 1994). However, concern for health within public policy finds its roots in the housing system. Concerns about the adequacy of housing arose around 1900 when outbreaks of contagious disease were identified and recognition of a link to inadequate housing led to the establishment of the Department of Health (Isaac & Olssen, 2000). A little over a century later, the HHP can be seen as reflecting a broadened recognition of the link between housing and health in a number of ways.

First, the programme reflects a clear commitment to the inter-sectoral thinking that is often undervalued within state bureaucracies. In working together, HNZC and DHB staff appear to be finding a fruitful common ground of concern and practical action that is advancing the wellbeing of families. Indeed, one of our provider respondents alluded to the challenge of "working against colleagues", suggesting that advocating inter-sectoral action can be counter-cultural within an organisation. Thus, it can also be seen to produce organizational change on many levels.

Second, the range of health and welfare concerns addressed by the HHP signals a breadth of thinking that sees health, as defined by the World Health Organisation as more than merely the absence of disease. For, while a concern for preventing disease (and especially in its early phases, meningococcal disease) remains a central preoccupation of the programme, our report has illustrated steps being taken towards health promotion at a number of levels and has identified an impressive array of referrals across the health, welfare, housing and education sectors.

As such, we see the HHP as employing a socio-ecological approach to human wellbeing. It places the household (rather than the house) at the centre of concern and recognises a range of interacting factors within the socio-economic environment that, in combination, ultimately determine health outcomes. These can be seen as both close to the respondent (e.g. aspects of the house itself) and further from the person's control (e.g. level of income support, access to health care). One key characteristic of this thinking is the recognition that systems are complex. Interventions and eventualities at one time and place are seen to have potential 'reverberations' on wellbeing, which have either positive or negative implications at subsequent occasions and locations. This thinking, which is implicit to the programme, is commendable for the way it embraces complexity and uncertainty.

8.2 Strengths of the programme

A key strength of the programme, highlighted by our evaluation, is the personal contact providers made with tenants

Through going into homes, they are able to gain a first-hand appreciation of the needs and challenges particular to that household. There is symbolic as well as financial importance in this visiting approach. The costs in terms of time and expense are borne by the programme, and, in an era when other types of home visits (e.g. doctors) have become rare, the act of visiting and offering empathetic inquiry appears to be affirming in itself.

Second, the breadth of the brief adopted by the HHP team is distinctive for the way it encompasses concerns ranging from the legal to the material. This generalist orientation is noteworthy given the abundance of specialist professions within the social service sector and the invariable needs for clients to consult with 'experts'.

Third, the absence of a clearly defined 'road map' as to how best to address the complex problems experienced by households has led to an innovative mindset on the part of programme providers. This willingness to try out different approaches in consultation with householders, and often drawing on limited evidence, has resulted in some of the success stories recounted earlier. The HHP team engage with households using a strengths based solution focused model. Obvious problems are resolved quickly thus providing families with the space and sometimes strength to work through more complex difficulties they might face.

Fourth, a further strength of the HHP is its flexibility. While structural alterations to a dwelling are an option, so too are alterations to practices. Through education and the offering of practical alternatives, new approaches to heating or ventilation have been shown to result in a healthier living environment.

A fifth strength of the HHP is that, where possible, alterations are made to houses rather than requiring families to move permanently to a different address. Research has demonstrated that moving house is a stressful experience, given the disruptions occupants incur in terms of social networks and sense of belonging (Kearns, 2004; Thomson et al., 2003). As the foregoing narratives recount, however, even temporary moves can be disruptive and, in some instances, a move out of the area along with the associated stress is a necessary trade-off in the quest for more appropriate housing.

8.3 Dimensions of HNZC and DHB relationships addressed by the programme

This evaluation has highlighted a number of important links between HNZC and the DHBs that reach beyond the familiar territory of physical hazards and their health consequences to embrace a broader set of exposures and outcomes, such as the links between social relationships and wellbeing.

Dunn, Hayes, Hulchanski, Hwang & Potvin (2004) categorise these links between housing and health into: physical design, psychological benefits, social benefits, socio-spatial context, political, financial and location attributes. To this list of overlapping categories we add cultural characteristics.

8.3.1 Design

The importance of housing design to health and social wellbeing has been well described in the health and housing literature. However, our evaluation has highlighted less obvious dimensions of this link, for example, the importance of outdoor spaces in providing for occasions of social and cultural significance.

8.3.2 Psychological benefits

As Thorns (2004) states, homes are not merely physical shells but also 'emotional and symbolic places filled with meaning for their occupants' (Thorns, 2004). In terms of wellbeing, there are clear benefits that arise from ascribing meaning to home, such as enhanced senses of identity, security and inclusion. A unique feature of the HHP is the opportunity households have to choose colours and fittings in their renovated homes. These opportunities affirm Dunn and colleagues' point that greater control over design and privacy has positive associations with health (Dunn et al., 2004).

8.3.3 Social benefits

It is self-evident to state that the home is a critical site for the development and maintenance of social relationships with household members and others (Dunn et al., 2004). Our evaluation establishes that not only is the issue of overcrowding addressed by the HHP but also social relationships are enhanced. Unexpectedly, we noted householders themselves taking a lead in dealing with household size through invoking guidelines established in collaboration with the HHP team. In our estimation, this illustrates the possibility that the agency of householders is enhanced through the HHP intervention.

8.3.4 Socio-spatial context

Our evaluation suggests that the relationship between space and place is an important dimension. Space can be conceived of as involving unit measures including floor area and the number of rooms, whereas a sense of place involves the meaning bestowed on the house and is developed over time with consideration to the needs of householders. Appropriate furnishings can be central to social interaction within families. Our evaluation also demonstrates the importance of granting attention to appropriate sleeping arrangements as well as adequate space for privacy and quiet.

8.3.5 Political

There has been a commendable receptiveness to inter-sectoral action among agencies whose mandate has previously been exclusively to focus on either housing or health.

8.3.6 Financial

For some households greater costs were incurred in living in the new or improved home, but the enhanced quality of life resulting from the changes outweighed these additional costs. This is in contrast to findings from research overseas showing adverse health consequences when housing-related costs increase as a result of housing improvements.

8.3.7 Location

Through attending to issues *in situ,* the HHP frequently achieves solutions that do not require changes in residential location. This maintains people's access to familiar social and other support services (e.g. school, shops, church) thus ensuring continuity in engagement.

8.3.8 Cultural

Cultural practices are affirmed as an important dimension of wellbeing. HHP design briefs allow for cultural expressions of identity. The provision of sleeping and living areas that offer flexibility of usage, for example, allow for the ebb and flow of household dynamics, as required for instance by cultural imperatives for hospitality.

8.4 Strengths and limitations of our evaluation

A key strength of our evaluation is that it is anchored in narratives: the stories offered by both the providers and users of the programme. These stories were elicited by culturally-matched interviewers, so we can have confidence that our assessment is grounded in the contexts of everyday life for those involved in both the delivery and receipt of the programme.

Two to three visits were undertaken in order to elicit householder stories. However because of the limited time period and retrospective nature of inquiry, our ability to discern with greater acuity the longer-term impacts of change to, and within, the households was compromised. We therefore consider that investigating the experiences and stories of households over a longer time course and before, during and after a HHP intervention would be of additional value.

The SCM is a new and distinct approach. It promotes an understanding of what works and what does not. The philosophy of the method is built on a premise similar to that of the programme - enhance and strength what works and remove or repair what doesn't. A further strength of our approach is the degree to which we involved the HHP team during the course of the evaluation. This occurred in terms of discussing the methodology and seeking input from an evaluation advisory group throughout the research process. This resulted in a high degree of 'buy in' that has resulted in a sense of co-ownership of the findings.

As a consequence of HNZC desires for in-depth reflections of the HHP providers and households in particular suburbs, the evaluation team chose to use an adapted approach of the SCM. Our methods for the selection of participating households could be criticised on three counts. First, rather than use the standard survey, it was the HHP team that identified the 15 households from each of two suburbs to be included in the sample frame. The team, including managers and providers, engaged in an interactive workshop to match households to predetermined selection criteria. These criteria were based on the perceived success of the type and depth of intervention. Second, we have no information on the characteristics or experience of those potential participants who declined participation. Third, a larger number and variety of households might potentially have offered a broader range of experiences, although the saturation of themes which we discerned relatively early in the fieldwork suggests this is not a significant concern. The number of households in each area was identified based on the concept of saturation (Yin, 1984; Lincoln & Gruba, 1985; Struass & Corbin, 1998).

During the period of the evaluation a number of tasks were completed in a limited time frame. As with most complex evaluations there were obstacles that impeded the progress of the evaluation or in someway affected the process. Time constraints were always a factor, particular in relation to the interviews with the participants. The evaluation was also affected by two unexpected situations. First ethics approval was much more complex and time consuming than expected. Second, regular access to participants was extremely difficult to maintain. At the completion of this report only twenty household visits are complete. The final ten in-depth interviews are on-going. They will be reported on in the next report in May 2006.

As a consequence of the limited number of fully completed interviews not all levels of analysis were able to be completed. A decision was made to leave until the next phase the completion of the comparison of households by intervention to the positive and negative bench marks. It must also be acknowledged that there were five different interviewers and despite training and on-going reviews and debriefing, there were undoubtedly some inter-interviewer differences that impact on the information collected. Finally, the evaluation team felt that the information from providers would have been enhanced by discussion with the more peripheral providers such as Work and Income.

8.5 Conclusion

A recurrent theme within the context of the HHP programme is the lack of 'fit' between households and the housing units occupied. Generally, the households accommodated are larger than those for which the houses were designed. This situation reflects the inability of the built environment to respond quickly to household needs However, as Gray (2004) points out, some of the health-threatening aspects of poor housing have less to do with the intrinsic characteristics of the dwelling, but rather are contingent on their use. The power of the HHP is the ability it presents for providers to be flexible in their responses to tenants in need. The household characteristics and housekeeping behaviours, as well as buildings themselves, are considered in light of their consequences for household wellbeing.

The HHP succeeds in addressing concerns and behaviour that extend beyond the walls of the house itself. The foregoing narratives highlight, for instance, a driveway illuminated to reduce the risk of a woman falling and a previously bed-bound man who began to visit neighbours to watch wrestling on television. In both cases, the occupants were rendered more confident to step outside their houses and engage with the world beyond. While arguably of modest consequence on the broad canvas of policy, these stories highlight significant changes for the individuals concerned, and their families. They show that the character and quality of housing can influence the type of interactions that occur within neighbourhoods that, in turn, have a bearing on trust and social cohesion.

Housing, it is argued, provides a crucial connection between the private and public worlds with, for instance, the security of a dwelling providing the ability to participate in the community (King, 2004). The fact that the HHP promotes participation in housing decisions and, indirectly, neighbourhood life, is of health consequence for, as social epidemiology tells us, social isolation is ultimately corrosive of health. In addressing the breadth of connections between housing and human welfare, the HHP is granting householders greater control over their residential environment and, in a sense, giving them a greater sense of agency in their lives.

APPENDIX

Appendix A: HHP PROVIDER INTERVIEW SCHEDULE

Note: Administrator - What is it they hear? For those in the field - What is it they see?
Name: Position: Organisation: Date

Part I

1. Could you describe the role you have within the Healthy Housing Programme?
2. How does the Healthy Housing Programme work?
3. Healthy Housing is an inter-sectorial programme. Could you describe how it works? Could you give some examples?
4. Collaboration has been described as the programme's greatest success. Is this true? Could you provide an example?
5. Can you describe any barriers to the programme?
6. Do you believe that this programme will continue to be supported? Why?

Part II

1. What is your understanding of the goals?
2. Could you describe your perception of the outcomes?
3. What about for the agencies involved, what have they gained?
4. What have you gained from being involved in the project?
5. Can you describe a story that you have heard about outcomes?
6. What do you think brought about these outcomes?
7. What's the programme's greatest achievement? Can you give an example?

Appendix B: HOUSEHOLD INTERVIEW DOCUMENTATION

Including:

- Participant Information Sheet
- Participant Consent Form
- Outline of three interviews and content
- Household Interview Schedule (to be conducted during household visit two)

THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND HEALTH SCIENCES

SCHOOL OF POPULATION HEALTH

INFORMATION SHEET FOR PARTICIPANTS
Healthy Housing programme evaluation

Principal Investigator: Dr Janet Clinton, Senior Lecturer, Health Systems, University Of Auckland. Ph 09 3737599 extn 89143.

You are invited to be part of a study looking at the outcomes of the Healthy Housing project in your community. It is part of a study looking at how well the Healthy Housing programme has worked, and we want to collect your perspective. We're interested in how the changes made to your home have affected areas of your everyday life.

Who is being asked to participate?
People living in HNZC households in certain areas of Auckland are being asked to help with the research. Your agreement to be contacted for housing research in the past gave us the opportunity to contact you for this study. We are looking for 30 households to take part in this study. You do not have to take part in the study, as being involved is voluntary (your choice).

Whether you choose to be involved or not will not affect the services you receive from Housing NZ.

What would I have to do?
We would like to talk to you about the changes made to your home by Housing NZ, and how these affected people living in your home. This would involve three interviews with you, each one about 45 minutes long. The interviews will happen over a month. If you choose to take part in the study, a person from our research team will visit you at your home to talk to you. You do not have to answer all the interview questions, and can stop the interview at any time if you want. At a later date, you may be asked to give consent for the research team to access other information about your household.

Who will see the study information you get from me?
Interview and research staff are the only people who will be allowed access to your information. Any information we collect from you will be kept secure in a locked cabinet or on a password-protected computer drive. When the results of the interviews are reported, you will not be identified in any way. Your tenancy in your home will not be affected at all, and Tenancy Managers will not see any of the information you provide to us. After the study is finished, you can ask for a copy of the tape of your interview.

If you do agree to take part you are free to withdraw from the study at any time, without having to give a reason and this will in no way affect your tenancy with Housing NZ.

If you have any questions about this research now or during the study, or if you change your mind about being involved, you can contact research staff at the University of Auckland.
Phone: Janet Clinton on 09 3737599 extn 89143, or Ingrid McDuff on 09 3737599 extn 89002.

Thank you very much for taking the time to think about this invitation.

If you have any queries or concerns regarding your rights as a participant in this study you may wish to contact a Health and Disability Advocate, telephone 0800 555 050.

This study has received ethical approval from the Northern X Ethics Committee.

SCHOOL OF POPULATION HEALTH

THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND HEALTH SCIENCES

CONSENT FORM
Healthy Housing programme evaluation

English	I wish to have an interpreter.	Yes	No
Māori	E hiahia ana ahau ki tetahi kaiwhakamaori/kaiwhaka pakeha korero.	Ae	Kao
Cook Island	Ka inangaro au i tetai tangata uri reo.	Ae	Kare
Fijian	Au gadreva me dua e vakadewa vosa vei au.	Io	Sega
Niuean	Fia manako au ke fakaaoga e taha tagata fakahokohoko kupu.	E	Nakai
Samoan	Ou te mana'o ia i ai se fa'amatala upu.	Ioe	Leai
Tokelaun	Ko au e fofou ki he tino ke fakaliliu te gagana Peletania ki na gagana o na motu o te Pahefika	Ioe	Leai
Tongan	Oku ou fiema'u ha fakatonulea.	Io	Ikai

- I have read and I understand the information sheet dated 20 April 2005 for volunteers taking part in the study designed to evaluate the Healthy Housing programme. I have had the opportunity to discuss this study. I am satisfied with the answers I have been given.
- I have had the opportunity to use whānau support or a friend to help me ask questions and understand the study.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time and this will in no way affect my tenancy in a Housing NZ residence.
- I understand that my participation in this study is confidential and that no material which could identify me will be used in any reports on this study.
- I have had time to consider whether to take part.
- I know who to contact if I have any questions about the study.
- I consent to my interview being audio-taped. YES/NO

I, _____ (full name) hereby consent to take part in this study.

Signature _____

Date _____

Dr Janet Clinton
Health Systems, School of Population Health
University of Auckland
Phone: 09 3737599 extn 89143

Project explained by:
Project role:
Signature:
Date:

Time/location of task	Description	Carried out by
Completed	Thirty households identified for interview, based on combination of housing intervention and health/social need.	HHP and evaluation team
Pre-interview	Visit to household to explain study, and invite to participate. Provide Participant Information Sheet and Consent form for household, and answer questions. *Consent only verbal at this stage; written to be obtained by interviewer.* Arrange first interview appointment, or for interviewer to contact household.	HHP personnel (area coordinator?)
Interview visit 1	Introductions, review Participant Information Sheet and Consent form and obtain written consent. *Complete two forms, one each for household and interviewer to keep.* Ask permission to tape record discussion, and remind that can be turned off at any point at participant's request. Taped material will be used by interviewer to compete questionnaire after the interview, and will then be erased. Begin interview with general discussion around HHP, what happened, effects. Arrange time for interview visit #2.	Interviewer
Interview visit 2	Review of discussion from first interview. Ask permission to tape record discussion, and remind that can be turned off at any point at participant's request. Begin conducting questionnaire section of interview. Arrange time for interview visit #3. *Think about appropriate contents of koha/gift hamper for household, and notify Ingrid so it can be arranged for third interview.*	Interviewer
Interview visit 3	*NB: A third interview may not be necessary if sufficient information has been obtained through first two.* Continue with questionnaire if necessary. Final discussion around what sort of household they would recommend the programme for in the future, and what they would promote/change about the programme. Present koha/gift to family, with thanks for sharing their stories.	Interviewer

Interview 1: Understanding the participant's story

Introductions:
Introduce yourself, with some background that might help the participant begin to feel like they can trust you.

'XXXX from the Healthy Housing Programme has talked you about my visit. Thank you for seeing me.'

Purpose of interviews:
Important to emphasise that we are not associated with HNZC, and they will not see the answers to questions.

'We have a team working from the University of Auckland, and our job is to understand the Healthy Housing project. We need to know how it works, what things could make it better, what things have got in the way and most importantly, what changes it has made to everyday life for people.'

'Everything you say is confidential. We are talking to lots of households and the all the information from these interviews will be put together and reported without any names or addresses. Nothing you say will affect you or the people in the household.'

Participant Information Sheet:
'I have an information sheet about the project for you to keep.'
Talk through Participant Information sheet, and explain key points, answer questions, etc.
'I am happy to answer any questions about the project.'

Consent forms:
'We need have your consent to ask you some questions….'
Show consent forms and gain signature. Remember consent to tape record interview.

Instructions:
'We need to do 3 interviews over the next few weeks. Each interview will only be about an hour. During those interviews we want to talk about the programme and how it has affected your situation and life in the household. We want to hear all sides of your story, including the negative stuff if that's how you feel – it all helps to understand.'

Do you have any questions?

'What I would like to do is hear you story about your household and the HHP.'

1. Can you tell us how it all started?
   What did you think it would mean?
   Can you describe how long it took and what happened?

2. Has this been a good thing for the household?
   Can you tell me more?
   What are the good things that have happened?

3. The programme is supposed to help people to be healthier and make our family and social lives better.
   Can you tell me whether you think this has happened?

Schedule: Can we make a time for the next interview?

Interview 2: HHP - Social and health impact on household

'Thank you seeing me again. Last week you told me your story. This week I would like to ask you some more specific questions about the programme and its effect.'

---

1. Question and answer guided by survey questionnaire.
   Tape-record, and fill in the responses yourself later, or ask questions from the survey and record on paper.

Important note: We encourage interviewers to gather stories and responses to questions in a way that encourages discussion, exchange and elaboration. To this end, simply reading from the questionnaire and filling in answers is not the preferred interview style. Rather, use the summary list of questions as reference for the discussion, using language that you and the participants are comfortable with, and record the conversation – answers can be transferred to the appropriate section of the questionnaire after the interview.

Schedule:
Can we make a time for next week?

Interview 3: Impact & sustainability

Greetings, appreciation for seeing you again.

1. If necessary, finish any answers not completed from survey in Interview 2.

---

2. 'This week we want to talk to you about the Healthy Housing programme in general, and whether it can really help communities be healthier and happier.'

   1. Think of another household where the HHP could make a difference:

   2. Why would you choose them?

   3. What kind of changes would you make to their house?

   4. What effect would it have?

   5. What is the best thing about the HH programme for the community?
      Can you describe that for me?

   6. If you had to say one thing about the programme that was the very best thing that has happened, what would that be?

Thank you so much for your assistance. Your story has great value for understanding the Healthy Housing programme.

HEALTHY HOUSING PROGRAMME
OUTCOMES EVALUATION

HOUSEHOLD INTERVIEW

- Confidential -

If found, please return this booklet to the UOA study team:

C/- Ingrid McDuff
Health Systems, School of Population Health
University of Auckland
Tamaki Campus, Morrin Road
Private Bag 92019
AUCKLAND

THE UNIVERSITY OF AUCKLAND
FACULTY OF MEDICAL AND HEALTH SCIENCES

CENTRE FOR HEALTH SERVICES RESEARCH AND POLICY

UniServices
Auckland UniServices Limited

UNIVERSITY of OTAGO
Te Whare Wānanga o Otāgo

Background information

Household code	
Interviewee's age and gender	
How long have you lived here?	
Where did you live before here?	
When did the Healthy Housing programme start in your home? How long were/are you involved with the programme?	
Do you work at the moment? What is your job? *(note paid/voluntary work)*	
Marital status	

How many children usually live in the household?	
Who else usually lives in the household?	
How old are the people living here?	
What gender?	
What do they do?	
How (if at all) are they related to you?	
Can you describe the main cultural connections of people living here?	

Health Management – primary healthcare begins at home

In your household, is there a person who has the main responsibility for everyone's health?

Who?

Can you describe why this person takes that role?

Is there anyone living here who has a major health problem or needs special care?

Can you describe/tell us about it?

How has the Healthy Housing programme affected this situation?

Can you describe the change(s)?

Whānau/family health and wellbeing (since Healthy Housing)

Before the Healthy Housing programme, what was the health of the household like?

Can you give examples of the health status of the household?

Have you noticed changes in the health of the household since the Healthy Housing programme?

Can you describe the changes in health since the HHP?

Do you think these health changes are connected to specific alterations in the home?

(» temperature, dampness, space, etc.)

Before the Healthy Housing programme, how did the household function/get along?
(» Happiness, feeling, how things worked)

Can you describe/give examples of how the household used to function?

Have you noticed changes in how the household gets along that have occurred since the Healthy Housing programme?

Has there been any change in interaction with wider whānau/community?
(» think about householders' outside interaction, and/or changes in visiting by others, school or pre-school attendance)

Can you describe/give examples for me?

Has the Healthy Housing programme led to any changes in your household financial situation?

Can you describe/give examples for me?

Have you found that you are more able to manage things like rent since the Healthy Housing programme?

Yes ☐ No ☐

Can you explain why?

Has the Healthy Housing programme led to any changes in the household relating to:

Employment?

Can you describe the changes?

Food choices?

Can you describe the changes?

Transport?

Can you describe the changes?

Electricity/bills cost?

Can you describe the changes?

Anything else?

Can you describe the changes?

Do you have close family/friends within walking distance?

Yes ☐ No ☐

Have you/they visited in the last month?

How often?

Before the Healthy Housing programme what contact did you have with people in healthcare?

What sort of healthcare people?

How much contact (daily? weekly? yearly?)

Do you see people in healthcare more or less since the programme?

Can you describe the change in using healthcare services?

Have you noticed whether changes to the house have affected the number of accidents or injuries to people around the house?

(» Falls, burns, slippery inside and out, involvement of vehicles, child safety in general)

Can you describe/give examples?

Social, Educational, and Cultural Outcomes

How have the changes to the house affected the way the household lives together?

Can you describe the changes in how the household gets along?

Has communal living space changed (living room, kitchen, etc.)?
Can you describe how the change affects the household?

Has there been any change in the time people spend at home?
Can you describe how the change affects the household?

Has there been any change in educational activities of the household since the Healthy Housing programme?
(» Children in school, job training, courses)

Can you describe the sort of changes that have happened?

Has there been a change in the social life of the household since the Healthy Housing programme?
(» Visiting friends, involvement in sports, cultural events)

Can you describe the changes for me?

If you were asked to move from this house tomorrow, how would you feel?

Can you explain why you would feel this way?

What do other members of the household think about the changes?

Can you describe why they might feel this way?

Are there any other effects that the household has experienced from the Healthy Housing programme?

How important is the programme to the community/area where you live?

Can you describe how the community feels about the programme?

What other things would improve your living environment?

Potential for involvement in further research

Along with asking people living in the household, another way to see how successful the Healthy Housing programme is would be to compare groups who have had the changes to those who haven't. Obviously you've already been part of the programme now, but we'd like your opinion.

How would you have felt if you were asked to be part of this research, if it meant that you would not have any changes made to your household for a year, and then get them?

Would you be willing to have information about your health and medical visits collected in the year before the Healthy Housing programme?

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